

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL

OFFICE OF AIR QUALITY

**Exide Technologies
2601 West Mt. Pleasant Blvd.
Muncie, Indiana 47302**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F035-14180-00028	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: Expiration Date:

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Stratospheric Ozone Protection

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary secondary lead smelting operation.

Authorized individual:	James E. Werbe
Source Address:	2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address:	P.O. Box 2098, Muncie, Indiana 47302
General Source Phone Number:	(765)747-9980
SIC Code:	3341
Source Location Status:	Delaware
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD; 1 of 28 source categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) lead-battery crusher/breaker, identified as ID #1, constructed in 1989, which is rated at 126,000 tons of scrap metal per year, with particulate matter emissions controlled by a venturi scrubber;
- (b) One (1) soda-ash/caustic soda neutralizing wash to neutralize sulfuric acid in the scrap metal before it is smelted, constructed in 1989, and two (2) soda ash silos, identified as ID #2a and #2b, both constructed in 1989, each with dimensions of 12.5' x 35', each capable of storing 6,388.9 tons per year, with particulate matter emissions controlled by fabric filters;
- (c) One (1) natural gas-fired rotary dryer, identified as ID #3, constructed in 1989, with a maximum capacity of six (6) million British thermal units per hour, which is controlled by the ventilation baghouse;
- (d) One (1) lead reverberatory furnace and reverberatory charge point, identified as ID #4, constructed in 1989, with a maximum capacity of 24.3 million British thermal units per hour, rated at 100,000 tons of lead per year, controlled by a process baghouse followed by twin packed sodium carbonate scrubbers;
- (e) One (1) blast furnace (cupola) and blast furnace (cupola) charge point, identified as ID #5, constructed in 1973 and reworked in 1989, rated at 30,000 tons of metal per year, controlled by a process baghouse followed by twin packed sodium carbonate scrubbers;
- (f) Two (2) lead pig casting machines, each rated at 120,000 tons of lead per year;
- (g) Twelve (12) natural gas-fired pot furnaces, identified as 6K1-12, all controlled by a refinery baghouse;

- (1) Three (3) rated at 125 tons holding capacity and 3.5 million British thermal units per hour, constructed in 1989;
- (2) Three (3) rated at 100 tons holding capacity and 3.5 million British thermal units per hour, constructed in 1989;
- (3) Four (4) rated at 100 tons holding capacity and 3.1 million British thermal units per hour, constructed in 1973;
- (4) Two (2) rated at 50 tons holding capacity and 3.1 million British thermal units per hour, constructed in 1973;
- (h) Material handling which is controlled by bin room baghouse.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) wood pallet shredder, constructed in 1993, capable of shredding 1,222 pounds of wood per hour, with emissions controlled by the pallet shredder baghouse;
 - (2) One (1) slag crusher, constructed in 1994, with emissions controlled by the bin room baghouse;
 - (3) One (1) strip casting machine, constructed in 1997, controlled by a fabric filter baghouse and a HEPA filter unit;
- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour;
 - (1) One (1) natural gas-fired seven (7) ton melting pot, identified as MP-1, constructed in 1997, with a capacity of 2.2 million British thermal units per hour; and
 - (2) One (1) natural gas-fired thirty-five (35) ton melting pot, identified as MP-2, constructed in 1997, with a capacity of 1.2 million British thermal units per hour.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish

to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
- (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than or July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit [326 IAC 2-8-4(5)(C)]. The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable);
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), emissions of particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or

- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Response Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously

submitted a request for an administrative amendment to the permit, and such request has not been denied.

- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) lead-battery crusher/breaker, identified as ID #1, constructed in 1989, which is rated at 126,000 tons of scrap metal per year, with particulate matter emissions controlled by a venturi scrubber;
- (b) One (1) soda-ash/caustic soda neutralizing wash to neutralize sulfuric acid in the scrap metal before it is smelted, constructed in 1989, and two (2) soda ash silos, identified as ID #2a and #2b, both constructed in 1989, each with dimensions of 12.5' x 35', each capable of storing 6,388.9 tons per year, with particulate matter emissions controlled by fabric filters;
- (c) One (1) natural gas-fired rotary dryer, identified as ID #3, constructed in 1989, with a maximum capacity of six (6) million British thermal units per hour, which is controlled by the ventilation baghouse;
- (d) One (1) lead reverberatory furnace and reverberatory charge point, identified as ID #4, constructed in 1989, with a maximum capacity of 24.3 million British thermal units per hour, rated at 100,000 tons of lead per year, controlled by a process baghouse followed by twin packed sodium carbonate scrubbers;
- (e) One (1) blast furnace (cupola) and blast furnace (cupola) charge point, identified as ID #5, constructed in 1973 and reworked in 1989, rated at 30,000 tons of metal per year, controlled by a process baghouse followed by twin packed sodium carbonate scrubbers;
- (f) Two (2) lead pig casting machines, each rated at 120,000 tons of lead per year;
- (g) Twelve (12) natural gas-fired pot furnaces, identified as 6K1-12, all controlled by a refinery baghouse:
 - (1) Three (3) rated at 125 tons holding capacity and 3.5 million British thermal units per hour, constructed in 1989;
 - (2) Three (3) rated at 100 tons holding capacity and 3.5 million British thermal units per hour, constructed in 1989;
 - (3) Four (4) rated at 100 tons holding capacity and 3.1 million British thermal units per hour, constructed in 1973;
 - (4) Two (2) rated at 50 tons holding capacity and 3.1 million British thermal units per hour, constructed in 1973;
- (h) Material handling which is controlled by bin room baghouse.

Insignificant Activities:

- (a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) wood pallet shredder, constructed in 1993, capable of shredding 1,222 pounds of wood per hour, with emissions controlled by the pallet shredder baghouse;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP Limit [326 IAC 2-8]

- (a) Pursuant to F035-5386-00028 and 326 IAC 2-8, the following limitations apply to the source:
- (1) The lead content of the battery throughput to the battery breaker/crusher (ID #1) shall not exceed 126,000 tons of scrap metal per twelve (12) consecutive month period, rolled monthly.
 - (2) The metal produced from the reverberatory furnace (ID #4) shall not exceed 100,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (3) Only a mixture of 70% to 100% by weight slag and 0% to 30% by weight lead bearing materials may be charged in the blast furnace (cupola) (ID #5). The resulting metal produced by the blast furnace (cupola) (ID #5) shall not exceed 30,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (4) The metal produced by both the reverberatory furnace and the blast furnace (cupola) (ID #5) shall not exceed a combined total of 120,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (5) The metal refined in the pot furnaces (6K1-12) shall not exceed a combined total production of 120,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (6) All scrap metal processed through the battery breaker/crusher (ID #1) shall undergo the soda-ash/caustic soda neutralizing wash to reduce the generation of SO₂ emissions by 85%.
- (b) These limits are equivalent to the following emission limitations:
- (1) Pursuant to F035-5386-00028, the combined PM10 emissions from the venturi scrubber, fabric filters, twin packed scrubber, twin packed sodium carbonate scrubbers, ventilation baghouse, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall not exceed 99.8 tons per twelve (12) consecutive month period (22.78 pounds per hour).

Unit	PM 10 Limit (ton/yr)	PM 10 Limit (lb/hr)
Battery crusher/breaker (ID#1)	18	4.11
Soda ash wash and 2 silos (ID#2)	1	0.23
Rotary dryer (ID#3)	0.2	0.05
Reverberatory furnace and charge point (ID#4)	3.58	0.82
Blast furnace (cupola) and charge point (ID#5)	3.22	0.74
Pig casting	65	14.84
Pot furnaces (6K1-12)	2.3	0.53
Material handling	6	1.37

This limit is structured such that when including emissions from insignificant combustion sources, the source wide total PM₁₀ emissions remain below one hundred (100) tons per twelve (12) consecutive month period.

- (2) Pursuant to F035-5386-00028, the SO₂ emissions shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (3) The emissions of a single HAP shall be limited to less than ten (10) tons per twelve (12) consecutive month period and the emissions of any combination of HAPs shall be limited to less than a total of twenty-five (25) tons per twelve (12) consecutive month period.

These limits render the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The FESOP PM₁₀ and SO₂ limitations limit source wide emissions to less than one hundred (100) tons per twelve (12) consecutive month period for both PM₁₀ and SO₂. This renders the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.
- (b) Emissions of PM shall be less than one hundred (100) tons per twelve consecutive month period (22.83 pounds per hour). This will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

These limits are equivalent to the following limits:

Process	PM Limit (ton/yr)	PM Limit (lb/hr)
Battery crusher/breaker	18	4.11
Soda ash wash and 2 silos	1	0.23
Rotary dryer	0.2	0.05
Reverberatory furnace and charge point	3.58	0.82
Blast furnace (cupola) and charge point	3.22	0.74
Pig casting	65	14.84
Pot furnaces	2.3	0.53
Material handling	6	1.37

- (c) Pursuant to F035-5386-00028, the combined lead emissions from the venturi scrubber, soda ash silo fabric filters, twin packed sodium carbonate scrubbers, ventilation baghouse, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall not exceed five (5) tons per twelve (12) consecutive month period (1.14 pounds per hour). This will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.1.3 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 30-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart X.

D.1.4 Secondary Lead Smelting [40 CFR 63, Subpart X] [326 IAC 20-13]

- (a) Pursuant to 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting), the following limitations apply:
- (1) The source must submit a title V permit application by the date as specified in 40 CFR 63.541(c) as currently written or subsequently amended.
 - (2) No owner or operator of a blast furnace (cupola), reverberatory furnace, or rotary furnaces shall discharge or cause to be discharged into the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).
 - (3) No owner or operator of a collocated blast furnace (cupola) and reverberatory furnace shall discharge or cause to be discharged into the atmosphere any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, when both furnaces are operating, except as follows below:

During periods when the reverberatory furnace is not operating, no owner or operator of a blast (cupola) furnace shall discharge or cause to be discharged into the atmosphere any gases that contain hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

During periods when only the reverberating furnace is operating, no total hydrocarbon limit applies to this source.
 - (4) The blast furnace (cupola) charging process fugitive emissions exhaust shall not contain total hydrocarbons in excess of the limits specified in D.1.4(c) of this permit.
- (b) Pursuant to 326 IAC 20-13-3 (Emission Limitations; Lead Standards for Exide Technologies), the following lead emission limitations apply:

Unit	Lead Emission Limitation (mg/dscm)
Ventilation Baghouse	0.5
Refinery Baghouse	0.5
Bin Room Baghouse	0.5
Venturi Scrubber (battery breaker scrubber)	0.5
Sodium Carbonate Scrubbers	1.0

D.1.5 Process Fugitive Emissions [40 CFR 63, Subpart X] [326 IAC 20-13]

Pursuant to 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting), the Permittee shall control process fugitive emission sources as follows:

- (a) Process fugitive emission sources shall be equipped with an enclosure hood meeting the requirements of 40 CFR 63.544(b) or be located in a total enclosure subject to general ventilation that maintains the building at a lower than ambient pressure to ensure in-draft through any doorway opening.

- (b) Ventilation air from all enclosure hoods and total enclosures shall be conveyed to a control device. Gases discharged to the atmosphere from the control devices shall not contain lead compounds in excess of 2.0 million grams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).
- (c) All dryer emission vents shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 million grams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

D.1.6 Fugitive Dust Sources [40 CFR 63, Subpart X] [326 IAC 20-13]

Pursuant to 40 CFR Part 63.545, the Permittee shall control fugitive dust emission sources as follows:

- (a) The Permittee shall prepare and operate according to a procedures manual that describes the measures that will be put in place to control fugitive dust emission sources. The controls specified in the standard operating procedures manual shall at a minimum include the requirements listed in 40 CFR 63.545(c).
- (b) The standard operating procedures manual shall require that daily records be maintained of all wet suppression, pavement cleaning, and vehicle washing activities performed to control fugitive dust emissions.
- (c) The permittee shall not discharge into the atmosphere from any building or enclosure ventilation system any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

D.1.7 Particulate Matter (PM) and Visible Emission Notations [40 CFR 60, Subpart L]

Pursuant to 40 CFR 60, Subpart L (Standards of Performance for Secondary Lead Smelters), the following limitations apply:

- (a) Visible emissions from the reverberatory furnace and blast furnace (cupola) shall be limited to twenty percent (20%) opacity.
- (b) Emissions of particulate matter from the reverberatory furnace and blast furnace (cupola) shall be limited to less than 50 mg/dscm (0.022 gr/dscf).
- (c) Visible emissions from the pot furnaces shall be limited to ten percent (10%) opacity.

D.1.8 Sulfur Dioxide [326 IAC 7-1.1]

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations) applies to the blast furnace (cupola) (ID #5) because the source has the potential to emit greater than twenty-five (25) tons per year of SO₂. Pursuant to this rule, the SO₂ emissions from the blast furnace (cupola) (ID #5) firing of coke fuel shall not exceed six (6) pounds per million British thermal units heat input.

D.1.9 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate.

Unit	Process Weight Rate (ton/yr)	Emission Limit (lb/hr)
Battery crusher/breaker	126000	24.5
Soda ash wash and 2 silos	6389	3.3
Reverberatory furnace and charge point	100000	21.0
Blast furnace (cupola) and charge point	30000	9.4
Pig casting	240000	37.7
Pot Furnaces	120000	23.7
Material handling	126000	24.5
Wood pallet shredder	1222	2.95

These limitations were calculated using the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.10 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.11 Particulate Matter (PM)

In order to comply with Conditions D.1.1, D.1.2, D.1.5 and D.1.9, venturi scrubber, soda ash silo fabric filters, twin packed sodium carbonate scrubbers, ventilation baghouse, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall be in operation at all times that the associated processes are in operation.

D.1.12 Sulfur Dioxide

In order to demonstrate compliance with Conditions D.1.1(d)(6) and D.1.6, continuous emission monitors (CEM) for SO₂ shall be operated at each sodium carbonate packed tower scrubber stack. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

D.1.13 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1, D.1.2 and D.1.7(b), the permittee shall perform:

- (1) PM and PM₁₀ testing on the venturi scrubber, bin room baghouse, and refinery baghouse before September 2006;
- (2) PM and PM₁₀ testing on the twin packed bed scrubber and ventilation baghouse before September 2005;

Utilizing methods as approved by the commissioner. PM10 includes filterable and condensible PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) Pursuant to Conditions D.1.4, D.1.5, and D.1.6 and 40 CFR Part 63.543(h) and (i), 63.544(e) and (f), the Permittee shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test). If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the Permittee shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.14 Visible Emissions Notations

- (a) Visible emission notations of the bin room baghouse, refinery baghouse, twin packed bed scrubber, venturi scrubber, and ventilation baghouse stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.15 Parametric Monitoring

The Permittee shall record the total static pressure drop across all baghouses and scrubber used in conjunction with the rotary dryer, reverberatory furnace, blast furnace (cupola), pot furnaces, lead pig casting, and material storage and slag crushing, at least once daily when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop is outside the following normal ranges:

- (a) Ventilation baghouse - 2 inches to 10 inches
- (b) Venturi scrubber - 10 inches to 25 inches
- (c) Twin packed bed sodium carbonate scrubber - 5 inches to 25 inches
- (d) Bin room baghouse - 2 inches to 10 inches
- (e) Refinery baghouse - 2 inches to 10 inches
- (f) Process baghouse - 2 inches to 10 inches

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - The Compliance Response Plan - Failure to Take Response

Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.16 Baghouse or Filter Inspections

An inspection shall be performed each calendar quarter of all bags or filters controlling the secondary lead smelting operation when venting to the atmosphere. A baghouse or filter inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags or filters shall be replaced.

D.1.17 Broken or Failed Bag or Filter Detection

In the event that bag or filter failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.18 Monitoring [40 CFR 63, Subpart X]

Pursuant to 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting), the Permittee shall:

- (a) Prepare and at all times operate according to a standard operating procedures manual that describes in detail procedures for inspection, maintenance, and bag leak detection and corrective action plans for all baghouses that are used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standard in 40 CFR 63.353-355.
 - (1) The standard operating procedures manual shall be submitted to IDEM, OAQ for review and approval.
 - (2) The procedures specified in the manual shall, at a minimum, include the requirements listed in 40 CFR 63.548.
- (b) Install, operate, and maintain a total hydrocarbon continuous monitoring system and comply with all of the requirements for continuous monitoring systems found in Subpart A, General Provisions and 40 CFR 63.548(j) in order to demonstrate continuous compliance with the total hydrocarbon emission standard.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.19 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1(a)-(d)(5), the Permittee shall maintain records complete and sufficient enough to document compliance with the various throughput limitations.
- (b) To document compliance with Conditions D.1.7 and D.1.14, the Permittee shall maintain records of once per shift visible emission notations of the stack exhaust.
- (c) To document compliance with Condition D.1.15, the Permittee shall maintain once per shift records of the inlet and outlet pressure difference during normal operation.
- (d) To document compliance with Condition D.1.16, the Permittee shall maintain records of the results of the inspections required under Condition D.1.15 and the dates the vents are redirected.
- (e) To demonstrate compliance with 40 CFR 63, Subpart X and Conditions D.1.4, D.1.5, D.1.6, and D.1.18, the Permittee shall maintain records of the information listed below:
 - (1) An identification of the date and time of all bag leak detection system alarms, their cause, and an explanation of the corrective actions taken;
 - (2) The output from the total hydrocarbon continuous monitoring system, an identification of the periods when the 3-hour average total hydrocarbon concentration exceeded the applicable standard and an explanation of the corrective actions taken; and
 - (3) Any record keeping required as part of the operating procedures manual required for the control of fugitive dust emissions and the operating procedures manual required for baghouses.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.20 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.1.1(d)(1)-(5) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) Pursuant to 40 CFR 63, Subpart X, reports shall include the following information:
 - (1) Records of all alarms from the bag leak detection system with a description of the procedures taken following each alarm;
 - (2) Records of the total hydrocarbon concentration, in 3-hour block averages, for those periods when the total hydrocarbon concentration being monitored exceeds the hydrocarbon limit;
 - (3) A summary of the records maintained as part of the practices described in the standard operating procedures manual for baghouses, including an explanation of the periods when procedures were not followed and the corrective actions taken; and

- (4) A summary of the fugitive dust control measure performed during the required reporting period, including an explanation of the periods when the procedures outlined in the standard operating procedures manual were not followed and the corrective actions taken.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (2) One (1) slag crusher, constructed in 1994, with emissions controlled by the bin room baghouse;
 - (3) One (1) strip casting machine, constructed in 1997, controlled by a fabric filter baghouse and a HEPA filter unit;
- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour;
 - (1) One (1) natural gas-fired seven (7) ton melting pot, identified as MP-1, constructed in 1997, with a capacity of 2.2 million British thermal units per hour; and
 - (2) One (1) natural gas-fired thirty-five (35) ton melting pot, identified as MP-2, constructed in 1997, with a capacity of 1.2 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

There are no specific regulations applicable to these units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
 (The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 (The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028
Facility: Battery breaker/crusher
Parameter: Lead content of the battery throughput
Limit: Less than 126,000 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028
Facility: Reverberatory furnace
Parameter: Metal production
Limit: Less than 100,000 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028
Facility: Blast furnace (cupola)
Parameter: Charging materials
Limit: Slag content - Between 70% and 100%
Lead content - Between 0% and 30%

YEAR: _____

Month	Column 1
	This Month
Month 1	
Month 2	
Month 3	

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028
Facility: Blast furnace (cupola)
Parameter: Metal Production
Limit: Less than 30,000 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028
Facility: Reverberatory furnace and blast furnace (cupola) combined
Parameter: Metal production
Limit: Less than 120,000 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028
Facility: Pot furnaces
Parameter: Metal Production
Limit: Less than 120,000 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Exide Technologies
Source Address: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Mailing Address: P.O. Box 2098, Muncie, Indiana 47302
FESOP No.: F035-14180-00028

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name:	Exide Technologies
Source Location:	2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
County:	Delaware
SIC Code:	3341,
Operation Permit No.:	F035-14180-00028
Permit Reviewer:	ERG/KC

On November 12, 2001 the Office of Air Quality (OAQ) had a notice published in the Muncie Star Press, Muncie, Indiana, stating that Exide Technologies had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a secondary lead smelting operation with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On December 12, 2001 Exide Technologies submitted comments on the proposed FESOP renewal. The summary of the comments is as follows:

Comment 1:

The rotary dryer is controlled by the ventilation baghouse only. The source would like this to be reflected in the permit.

Response to comment 1:

The following change was made to the permit.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) lead-battery crusher/breaker, identified as ID #1, constructed in 1989, which is rated at 126,000 tons of scrap metal per year, with particulate matter emissions controlled by a venturi scrubber;
- (b) One (1) soda-ash/caustic soda neutralizing wash to neutralize sulfuric acid in the scrap metal before it is smelted, constructed in 1989, and two (2) soda ash silos, identified as ID #2a and #2b, both constructed in 1989, each with dimensions of 12.5' x 35', each capable of storing 6,388.9 tons per year, with particulate matter emissions controlled by fabric filters;

- (c) One (1) natural gas-fired rotary dryer, identified as ID #3, constructed in 1989, with a maximum capacity of six (6) million British thermal units per hour, which is controlled by the ventilation baghouse ~~followed by a twin packed scrubber~~;

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) lead-battery crusher/breaker, identified as ID #1, constructed in 1989, which is rated at 126,000 tons of scrap metal per year, with particulate matter emissions controlled by a venturi scrubber;
- (b) One (1) soda-ash/caustic soda neutralizing wash to neutralize sulfuric acid in the scrap metal before it is smelted, constructed in 1989, and two (2) soda ash silos, identified as ID #2a and #2b, both constructed in 1989, each with dimensions of 12.5' x 35', each capable of storing 6,388.9 tons per year, with particulate matter emissions controlled by fabric filters;
- (c) One (1) natural gas-fired rotary dryer, identified as ID #3, constructed in 1989, with a maximum capacity of six (6) million British thermal units per hour, which is controlled by the ventilation baghouse ~~followed by a twin packed scrubber~~;

Comment 2:

Exide Technologies noted that their current permit requires semi-annual compliance reporting and this permit requires quarterly compliance. They believe that quarterly reporting is burdensome and they would like quarterly reporting to be changed to semi-annual reporting.

Response to Comment 2:

IDEM has authority to require quarterly reports. Reports must be submitted at least every 6 months under 326 IAC 2-7-5(3)(C)(I). OAQ believes that a period of time longer than every quarter will usually not provide sufficient reporting of continuous compliance. The quarterly reports are required to demonstrate compliance with the FESOP limits in the permit. These reports are different from the semi-annual compliance reports. Therefore, no change was made as a result of this comment.

Comment 3:

The source noted that there is an error in Condition D.1.2(b) (PSD Minor Limit). The limit states that PM emissions shall be less than 100 tons per 12 consecutive month period (57.1 pounds per hour). 5.71 lb/hr does not equal 100 ton/yr. The source would like this error to be corrected. The PSD minor limit shall be less than 100 tons/yr and not 250 tons/yr because this source is one of the 28 specifically listed sources.

Response to Comment 3:

The error in Condition D.1.2(b) was corrected as follows:

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The FESOP PM10 and SO₂ limitations limit source wide emissions to less than one hundred (100) tons per twelve (12) consecutive month period for both PM10 and SO₂. This renders the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

- (b) Emissions of PM shall be less than one hundred (100) tons per twelve consecutive month period (~~22.8357~~ 4 pounds per hour). This will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

Comment 4:

The source noted that the original FESOP does not specify individual unit PM limits as are specified in Condition D.1.2(b) (PSD Minor Limit). Since this condition already specified a plant wide PM limit, the source requests that the individual limit to be removed from this permit.

Response to Comment 4:

No change was made as a result of this comment. The individual unit PM limits ensure that the source is in compliance with the source wide PM limit. They also clarify the limits for testing purposes.

Comment 5:

The source feels that Conditions D.1.2(c) (PSD Minor Limit) and D.1.11 (Particulate Matter) refer to fabric filters too vaguely and refer to two twin packed scrubbers when there should only be one (per comment 1). The source would like "fabric filters" to be changed to "soda ash silo fabric filters." The source would like "twin packed scrubber" to be removed and replaced with "strip casting fabric/HEPA filters."

Response to Comment 5:

The description of the fabric filters will be changed to be more precise and the twin packed scrubber will be removed per comment 1. The strip casting fabric/HEPA filters will not be added since the strip caster is not in section D.1. The following changes were made:

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The FESOP PM₁₀ and SO₂ limitations limit source wide emissions to less than one hundred (100) tons per twelve (12) consecutive month period for both PM₁₀ and SO₂. This renders the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.
- (b) Emissions of PM shall be less than one hundred (100) tons per twelve consecutive month period (22.83 pounds per hour). This will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

These limits are equivalent to the following limits:

Process	PM Limit (ton/yr)	PM Limit (lb/hr)
Battery crusher/breaker	18	4.11
Soda ash wash and 2 silos	1	0.23
Rotary dryer	0.2	0.05
Reverberatory furnace and charge point	3.58	0.82
Blast furnace (cupola) and charge point	3.22	0.74
Pig casting	65	14.84
Pot furnaces	2.3	0.53

Material handling	6	1.37
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- (c) Pursuant to F035-5386-00028, the combined lead emissions from the venturi scrubber, **soda ash silo** fabric filters, ~~twin packed scrubber~~, twin packed sodium carbonate scrubbers, ventilation baghouse, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall not exceed five (5) tons per twelve (12) consecutive month period (1.14 pounds per hour). This will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

D.1.11 Particulate Matter (PM)

In order to comply with Conditions D.1.1, D.1.2, D.1.5 and D.1.9, venturi scrubber, **soda ash silo** fabric filters, ~~twin packed scrubber~~, twin packed sodium carbonate scrubbers, ventilation baghouse, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall be in operation at all times that the associated processes are in operation.

Comment 6:

The source noted that Condition D.1.4(d) references Condition D.1.3(c) when it should reference D.1.4(c). They would like this error fixed.

Response to Comment 6:

The typing error was fixed as follows:

D.1.4 Secondary Lead Smelting [40 CFR 63, Subpart X] [326 IAC 20-13]

Pursuant to 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting), the following limitations apply:

- (a) The source must submit a title V permit application by the date as specified in 40 CFR 63.541(c) as currently written or subsequently amended.
- (b) No owner or operator of a blast furnace (cupola), reverberatory furnace, or rotary furnaces shall discharge or cause to be discharged into the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).
- (c) No owner or operator of a collocated blast furnace (cupola) and reverberatory furnace shall discharge or cause to be discharged into the atmosphere any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, when both furnaces are operating, except as follows below:
- During periods when the reverberatory furnace is not operating, no owner or operator of a blast (cupola) furnace shall discharge or cause to be discharged into the atmosphere any gases that contain hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.
- During periods when only the reverberating furnace is operating, no total hydrocarbon limit applies to this source.
- (d) The blast furnace (cupola) charging process fugitive emissions exhaust shall not contain total hydrocarbons in excess of the limits specified in D.1.43 (c) of this permit.

Comment 7:

The source feels that the limits in Condition D.1.9 (Particulate Matter (PM) [326 IAC 6-3-2]) are in contradiction with the limits in Condition D.1.2 (PSD Minor Limit) and therefore Condition D.1.9 should be removed along with any reference to this condition.

Response to Comment 7:

No change was made in response to this comment. 326 IAC 6-3-2 and 326 IAC 2-2 are different rules, therefore different limits to comply with these rules must be specified. Both 326 IAC 6-3-2 and the limits in D.1.2 to remain a PSD minor source are applicable to the source. For this reason, they both must be included in the permit. The PSD minor limits and the FESOP limits are both more stringent than the 326 IAC 6-3-2 limits. In order to be in compliance with the permit requirements, the source must be in compliance with the most stringent limits. Compliance with these limits will ensure compliance with 326 IAC 6-3-2.

Comment 8:

The source noted that pursuant to 326 IAC 20-13-6, fugitive dust stacks shall conduct an initial compliance test, but are not required to conduct testing on an annual bases. Exide's venturi scrubber stack is a fugitive dust stack and therefore the source would like to add the following sentence to D.1.13(b) (Testing Requirements): The venturi scrubber stack (a fugitive dust stack) is not subject to this testing requirement.

Response to Comment 8:

No change was made as a result of this comment. The venturi scrubber stack does not meet the definition of a fugitive dust stack. The emissions from the battery crusher/breaker are vented through the stack in order to reduce the lead and PM emissions from the crusher/breaker. They are not vented simply to remove them from the building.

Comment 9:

Exide noted that their current permit required visible emissions notations once per day and this permit requires the notations once per shift. The source requested that the visible emissions notations be required only once per day.

Response to Comment 9:

No change was made as result of this comment. The visible emissions notations are used to indicate compliance with 326 IAC 5-1 and 326 IAC 6. This requirement is designed as a trigger that the source perform some corrective action on the facility if visible emissions are abnormal, to ensure continuous compliance with emission limitation. IDEM believes that once per shift notations are reasonable and adequate in order to ensure compliance with permit requirements.

Comment 10:

The source noted that Condition D.1.19(c) (Reporting Requirements) is confusing. The source's baghouses and scrubbers always vent to the atmosphere. Therefore, they would like "when venting to the atmosphere" to be removed from the permit. The source does not redirect their vents so they would like language referring to redirecting vents to be removed. Since the parametric monitoring condition does not mention cleaning cycles, the source would like this reference to be removed from the permit.

Response to Comment 10:

Since the baghouses and scrubbers always vent to the atmosphere, "when venting to the atmosphere" was deleted from the permit. Since the source does not redirect their vents, the language referring to redirecting vents was removed. The language referring to cleaning cycles was also removed. Therefore, the following changes were made to the permit:

D.1.19 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1(a)-(d)(5), the Permittee shall maintain records complete and sufficient enough to document compliance with the various throughput limitations.
- (b) To document compliance with Conditions D.1.7 and D.1.14, the Permittee shall maintain records of once per shift visible emission notations of the stack exhaust.
- (c) To document compliance with Condition D.1.15, the Permittee shall maintain **once per shift records of the inlet and outlet pressure difference during normal operation.**
~~the following:~~
 - ~~(1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:~~
 - ~~(A) Inlet and outlet differential static pressure; and~~
 - ~~(B) Cleaning cycle operation.~~
- (d) To document compliance with Condition D.1.16, the Permittee shall maintain records of the results of the inspections required under Condition D.1.15 and the dates the vents are redirected.
- (e) To demonstrate compliance with 40 CFR 63, Subpart X and Conditions D.1.4, D.1.5, D.1.6, and D.1.18, the Permittee shall maintain records of the information listed below:
 - (1) An identification of the date and time of all bag leak detection system alarms, their cause, and an explanation of the corrective actions taken;
 - (2) The output from the total hydrocarbon continuous monitoring system, an identification of the periods when the 3-hour average total hydrocarbon concentration exceeded the applicable standard and an explanation of the corrective actions taken; and
 - (3) Any record keeping required as part of the operating procedures manual required for the control of fugitive dust emissions and the operating procedures manual required for baghouses.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 11:

The source would like all the changes above to be reflected in the TSD.

Response to Comment 11:

The OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material are documented in this addendum to the TSD to accomplish the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Upon further review, IDEM made the following changes to the permit:

1. Specific hourly limits for the various units were added to the FESOP limit in order to clarify the limits for testing purposes. The following change was made:

D.1.1 FESOP Limit [326 IAC 2-8]

-
- (a) Pursuant to F035-5386-00028 and 326 IAC 2-8, the following limitations apply to the source:
- (1) The lead content of the battery throughput to the battery breaker/crusher (ID #1) shall not exceed 126,000 tons of scrap metal per twelve (12) consecutive month period, rolled monthly.
 - (2) The metal produced from the reverberatory furnace (ID #4) shall not exceed 100,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (3) Only a mixture of 70% to 100% by weight slag and 0% to 30% by weight lead bearing materials may be charged in the blast furnace (cupola) (ID #5). The resulting metal produced by the blast furnace (cupola) (ID #5) shall not exceed 30,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (4) The metal produced by both the reverberatory furnace and the blast furnace (cupola) (ID #5) shall not exceed a combined total of 120,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (5) The metal refined in the pot furnaces (6K1-12) shall not exceed a combined total production of 120,000 tons per twelve (12) consecutive month period, rolled monthly.
 - (6) All scrap metal processed through the battery breaker/crusher (ID #1) shall undergo the soda-ash/caustic soda neutralizing wash to reduce the generation of SO₂ emissions by 85%.
- (b) These limits are equivalent to the following emission limitations:
- (1) Pursuant to F035-5386-00028, the combined PM₁₀ emissions from the venturi scrubber, fabric filters, twin packed scrubber, twin packed sodium carbonate scrubbers, ventilation baghouse, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall not exceed 99.8 tons per twelve (12) consecutive month period (22.78 pounds per hour).

Unit	PM 10 Limit (ton/yr)	PM 10 Limit (lb/hr)
Battery crusher/breaker (ID#1)	18	4.11
Soda ash wash and 2 silos (ID#2)	1	0.23

Unit	PM 10 Limit (ton/yr)	PM 10 Limit (lb/hr)
Rotary dryer (ID#3)	0.2	0.05
Reverberatory furnace and charge point (ID#4)	3.58	0.82
Blast furnace (cupola) and charge point (ID#5)	3.22	0.74
Pig casting	65	14.84
Pot furnaces (6K1-12)	2.3	0.53
Material handling	6	1.37

This limit is structured such that when including emissions from insignificant combustion sources, the source wide total PM10 emissions remain below one hundred (100) tons per twelve (12) consecutive month period.

- (2) Pursuant to F035-5386-00028, the SO₂ emissions shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

2. Several conditions were modified by removing language stating that the condition was not federally enforceable. Federal law states that failure to comply with any permit condition issued under a program that has been approved into a State Implementation Plan (SIP) is to be treated as a violation of the SIP (40 CFR 52.23). This has the effect of making all FESOP conditions federally enforceable. Indiana's FESOP program was approved as a part of Indiana's SIP at 40 CFR 52.788. Neither the program nor the underlying rule, 326 IAC 2-8 contains provisions for designating certain conditions as not federally enforceable.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. ~~326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.~~

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). ~~326 IAC 6-4-2(4) is not federally enforceable.~~

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. ~~The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.~~

3. To clarify the facility specific events that would not qualify as a deviation, the following changes were made:

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit**, shall be reported according to the schedule stated in the applicable requirement and ~~do~~ **does** not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~

~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

4. To clarify that the asbestos notification should be certified by the owner or operator and not the responsible official, the following changes were made:

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
 - (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable..
5. The notification sent in response to non-compliance with a stack test requires a certification by the authorized individual. Therefore, condition C.17 has been revised as following:

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]

-
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of

the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do ~~not~~ require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- 6. The QAQ has restructured condition C.16 to clarify the contents and implementation of the Compliance Response Plan. The language regarding the OAQ's direction to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion, and it is not necessary to state criteria regarding the exercise of that discretion in the permit.:

C.16 Compliance ~~Monitoring Response~~ Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to **prepare** ~~implement: a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

(1) ~~This condition;~~

(2) ~~The Compliance Determination Requirements in Section D of this permit;~~

(3) ~~The Compliance Monitoring Requirements in Section D of this permit;~~

(4) ~~The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~

(5) ~~A~~ **a** Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. **A** CRP's shall be submitted to IDEM, OAQ upon request ~~and shall be subject to review and approval by IDEM, OAQ, .~~ The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, **supplemented from time to time by the Permittee**, and maintained on site, and ~~is~~ comprised of:

- ~~(A)~~(1) Reasonable response steps that may be implemented in the event that ~~compliance related information indicates that~~ a response step is needed pursuant to the requirements of Section D of this permit; and **an expected time frame for taking reasonable response steps.**

~~(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows:** ~~Failure to take reasonable response steps may constitute a violation of the permit.~~

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(3) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) ~~Upon investigation of a compliance monitoring excursion, the~~ **The** Permittee is ~~excused from taking~~ **not required to take any** further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment **and** ~~This shall be an excuse from taking further response steps providing that~~ prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

- (d) **When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.**
- ~~(d)(e)~~ ~~Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.~~ **The Permittee shall record all instances when response steps are taken.** In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- ~~(e)(f)~~ **Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed at all times when the equipment emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.** If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

7. As a result of the previous change, the following changes had to be made:

D.1.14 Visible Emissions Notations

- (a) Visible emission notations of the bin room baghouse, refinery baghouse, twin packed bed scrubber, venturi scrubber, and ventilation baghouse stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance **Response** Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.15 Parametric Monitoring

The Permittee shall record the total static pressure drop across all baghouses and scrubber used in conjunction with the rotary dryer, reverberatory furnace, blast furnace (cupola), pot furnaces, lead pig casting, and material storage and slag crushing, at least once daily when the processes are in

operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop shall be maintained at the following ranges:

- (a) Ventilation baghouse - 2 inches to 10 inches
- (b) Venturi scrubber - 10 inches to 25 inches
- (c) Twin packed bed sodium carbonate scrubber - 5 inches to 25 inches
- (d) Bin room baghouse - 2 inches to 10 inches
- (e) Refinery baghouse - 2 inches to 10 inches
- (f) Process baghouse - 2 inches to 10 inches

or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance **Response Monitoring Plan - Failure to Take Response Steps**, shall be considered a violation of this permit.

D.1.17 Broken or Failed Bag or Filter Detection

In the event that bag or filter failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance **Response Monitoring Plan - Failure to Take Response Steps**, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

8. Parametric monitoring condition (condition D.1.15) has been revised to clarify that the facility specific events would not qualify as a deviation.

D.1.15 Parametric Monitoring

The Permittee shall record the total static pressure drop across all baghouses and scrubber used in conjunction with the rotary dryer, reverberatory furnace, blast furnace (cupola), pot furnaces, lead pig casting, and material storage and slag crushing, at least once daily when the processes are in operation when venting to the atmosphere. **When for any one reading, the pressure drop is outside the following normal ranges** ~~Unless operated under conditions for which the~~

~~Compliance Response Plan specifies otherwise, the pressure drop shall be maintained at the following ranges:~~

- (a) Ventilation baghouse - 2 inches to 10 inches
- (b) Venturi scrubber - 10 inches to 25 inches
- (c) Twin packed bed sodium carbonate scrubber - 5 inches to 25 inches
- (d) Bin room baghouse - 2 inches to 10 inches
- (e) Refinery baghouse - 2 inches to 10 inches
- (f) Process baghouse - 2 inches to 10 inches

or a range established during the latest stack test, **the Permittee shall take reasonable response steps in accordance with Section C - The Compliance Response Plan - Failure to Take Response Steps.** ~~for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~ **A pressure reading that is outside the above mentioned range is not a deviation from this permit.** Failure to take response steps in accordance with Section C - Compliance Response Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

9. For clarification purposes, the following condition titles were changed:

D.1.4 Secondary Lead Smelting [40 CFR 63, Subpart X] [326 IAC 20-13] **[326 IAC 20-13]**

D.1.5 Process Fugitive Emissions [40 CFR 63, Subpart X] **[326 IAC 20-13]**

D.1.6 Fugitive Dust Sources [40 CFR 63, Subpart X] **[326 IAC 20-13]**

10. Pursuant to 326 IAC 20-13-3 (Emission Limitations; Lead Standards for Exide Technologies), the following change was made to the permit:

D.1.4 Secondary Lead Smelting [40 CFR 63, Subpart X] [326 IAC 20-13]

- (a) Pursuant to 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting), the following limitations apply:
 - (1)(a) The source must submit a title V permit application by the date as specified in 40 CFR 63.541(c) as currently written or subsequently amended.
 - (2)(b) No owner or operator of a blast furnace (cupola), reverberatory furnace, or rotary furnaces shall discharge or cause to be discharged into the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).
 - (3)(c) No owner or operator of a collocated blast furnace (cupola) and reverberatory furnace shall discharge or cause to be discharged into the atmosphere any gases that contain total hydrocarbons in excess of 20 parts per million by volume,

expressed as propane corrected to 4 percent carbon dioxide, when both furnaces are operating, except as follows below:

During periods when the reverberatory furnace is not operating, no owner or operator of a blast (cupola) furnace shall discharge or cause to be discharged into the atmosphere any gases that contain hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

During periods when only the reverberating furnace is operating, no total hydrocarbon limit applies to this source.

- (4)(d)** The blast furnace (cupola) charging process fugitive emissions exhaust shall not contain total hydrocarbons in excess of the limits specified in D.1.4(c) of this permit.

- (b) Pursuant to 326 IAC 20-13-3 (Emission Limitations; Lead Standards for Exide Technologies), the following lead emission limitations apply:**

Unit	Lead Emission Limitation (mg/dscm)
Ventilation Baghouse	0.5
Refinery Baghouse	0.5
Bin Room Baghouse	0.5
Venturi Scrubber (battery breaker scrubber)	0.5
Sodium Carbonate Scrubbers	1.0

11. Some condition references were inadvertently left out of condition D.1.13. Therefore, the following changes were made to the permit:

D.1.13 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.1.1, and D.1.2 and **D.1.7(b)**, the permittee shall perform:
- (1) PM and PM10 testing on the venturi scrubber, bin room baghouse, and refinery baghouse before September 2006;
 - (2) PM and PM10 testing on the twin packed bed scrubber and ventilation baghouse before September 2005;

Utilizing methods as approved by the commissioner. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) Pursuant to **Conditions D.1.4, D.1.5, and D.1.6** and 40 CFR Part 63.543(h) and (i), 63.544(e) and (f), the Permittee shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test). If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead

per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the Permittee shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable Operating Permit (FESOP) Renewal

Source Background and Description

Source Name: Exide Technologies
Source Location: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
County: Delaware
SIC Code: 3341,
Operation Permit No.: F035-14180-00028
Permit Reviewer: ERG/KC

The Office of Air Quality (OAQ) has reviewed a renewal FESOP application from Exide Technologies relating to the operation of secondary lead smelting operation. Exide Technologies was issued FESOP 035-5386-00028 on December 13, 1996.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) lead-battery crusher/breaker, identified as ID #1, constructed in 1989, which is rated at 126,000 tons of scrap metal per year, with particulate matter emissions controlled by a venturi scrubber;
- (b) One (1) soda-ash/caustic soda neutralizing wash to neutralize sulfuric acid in the scrap metal before it is smelted, constructed in 1989;
- (c) Two (2) soda ash silos, identified as ID #2a and #2b, both constructed in 1989, each with dimensions of 12.5' x 35', each capable of storing 6,388.9 tons per year, with particulate matter emissions controlled by fabric filters;
- (d) One (1) natural gas-fired rotary dryer, identified as ID #3, constructed in 1989, with a maximum capacity of six (6) million British thermal units per hour, which is controlled by the ventilation baghouse followed by a twin packed scrubber;
- (e) One (1) lead reverberatory furnace, identified a ID #4, constructed in 1989, with a maximum capacity of 24.3 million British thermal units per hour, rated at 100,000 tons of lead per year, controlled by a process baghouse followed by twin packed sodium carbonate scrubbers;
- (f) One (1) blast furnace (cupola), identified as ID #5, constructed in 1973 and reworked in 1989, rated at 30,000 tons of metal per year, controlled by a process baghouse followed by twin packed sodium carbonate scrubbers;

- (g) Reverberatory and blast furnace charge points, constructed in 1989, controlled by ventilation baghouse;
- (h) Two (2) lead pig casting machines, each rated at 120,000 tons of lead per year;
- (i) Twelve (12) natural gas-fired pot furnaces, identified as 6K1-12, all controlled by a refinery baghouse:
 - (1) Three (3) rated at 125 tons holding capacity and 3.5 million British thermal units per hour, constructed in 1989;
 - (2) Three (3) rated at 100 tons holding capacity and 3.5 million British thermal units per hour, constructed in 1989;
 - (3) Four (4) rated at 100 tons holding capacity and 3.1 million British thermal units per hour, constructed in 1973;
 - (4) Two (2) rated at 50 tons holding capacity and 3.1 million British thermal units per hour, constructed in 1973;
- (j) Material handling which is controlled by bin room baghouse.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this renewal review process.

New Emission Units and Pollution Control Equipment Receiving New Source Review Approval

There are no new emission units and pollution control equipment receiving new source review approval during this renewal review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NO_x, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) wood pallet shredder, constructed in 1993, capable of shredding 1,222 pounds of wood per hour, with emissions controlled by the pallet shredder baghouse;
 - (2) One (1) slag crusher, constructed in 1994, with emissions controlled by the bin room baghouse;
 - (3) One (1) strip casting machine, constructed in 1997, controlled by a fabric filter baghouse and a HEPA filter unit;
- (b) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;

- (c) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour;
 - (1) One (1) natural gas-fired seven (7) ton melting pot, identified as MP-1, constructed in 1997, with a capacity of 2.2 million British thermal units per hour; and
 - (2) One (1) natural gas-fired thirty-five (35) ton melting pot, identified as MP-2, constructed in 1997, with a capacity of 1.2 million British thermal units per hour.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) SMF035-8502-00028, issued on May 11, 1999; and
- (b) F035-5386-00028, issued on December 13, 1996 and expiring on December 13, 2001.

All conditions from previous approvals were incorporated into this FESOP except:

Condition: Operation Condition 8(b) of CP035-3247-60028, issued June 10, 1994 and Operation Condition 5(b) of 18-09-93-0262, issued August 26, 1989.

That particulate matter (PM) emissions resulting from natural gas fuel combustion in the rotary dryer, pot furnaces and reverberatory furnace shall comply with 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating). Particulate matter emissions from this equipment shall be limited to 0.45 pounds per million BTU heat input, pursuant to that rule.

Reason not Incorporated: This condition was not incorporated into this FESOP because 326 IAC 6-2 only applies to boilers. These units are not boilers.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on March 14, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 through 4). All emissions and emission calculations were taken from F035-5386-00028.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Potential To Emit (tons/year)
PM	26461
PM-10	3638
SO ₂	5598
VOC	1.18
CO	18.03
NO _x	40.96

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Lead	5514
Benzene	4.51x10 ⁻⁴
Dichlorobenzene	2.58x10 ⁻⁴
Formaldehyde	1.61x10 ⁻²
Hexane	3.86x10 ⁻¹
Toluene	7.3x10 ⁻⁴
Cadmium	2.36x10 ⁻⁴
Chromium	3x10 ⁻⁴
Manganese	8.16x10 ⁻⁵
Nickel	4.51x10 ⁻⁴
TOTAL	5514

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10 and SO₂ are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict PTE to below Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP). This source has chosen to limit the emissions PM10 and SO₂ to below one hundred (100) tons per twelve (12) consecutive month period each, the emissions of single HAPs to below ten (10) tons per twelve (12) consecutive month period, and the emissions of any combination of HAPs to below twenty-five (25) tons per twelve (12) consecutive month period. This limitation will render the requirements of 326 IAC 2-7 not applicable.
- (d) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on December 13, 1996, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F035-5386-00028; issued on December 13, 1996).

	Potential to Emit (tons/year)						
Process/ Facility	PM	PM- 10	SO ₂	VOC	CO	NO _x	HAPs
Battery crusher/ breaker	18	18	0	0	0	0	1 tpy of lead
Soda ash pneumatic conveying through 2 silos	1	1	0	0	0	0	0
Reverberatory furnace	3.58	1.15	73.49	0	0	18	1.4 tpy lead
Blast furnace	3.22	1.35	12.16	0	0	1.5	1.09 tpy lead
Pot furnaces	3.62	3.62	0.1	0.95	14.57	17.34	0.75 tpy lead
Pig casting	65	65	0	0	0	0	0
Rotary dryer	0.2	0.2	0.02	0.14	2.21	2.63	Negligible
Insignificant Activities	0.11	0.11	0.01	0.08	1.25	1.49	Negligible
Total Emissions	Less than 100	Less than 100	Less than 100	1.17	18.03	40.96	Less than 5 for lead Less than 10 for a single HAP Less than 25 for a combination of HAPs

County Attainment Status

The source is located in Delaware County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Delaware County has been designated as attainment or unclassifiable for ozone.
- (b) Delaware County has been classified as attainment or unclassifiable for PM₁₀, SO₂, NO₂, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

- (a) The reverberatory furnaces, blast (cupola) furnace, and pot furnaces are subject to 40 CFR Part 60, Subpart L (Standards of Performance for Secondary Lead Smelters) because they were constructed after the applicability date of June 11, 1973. Pursuant to this rule, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from the blast (cupola) or reverberatory furnace any gases which:

- (1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).
- (2) Exhibit 20 percent opacity or greater.

No owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any pot furnace any gasses which exhibit 10 percent opacity or greater.

- (b) The blast furnace (cupola), reverberatory furnace, and rotary dryer are subject to 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting) because the source is a secondary lead smelter and these units are listed in the applicability section of the rule. Pursuant to this rule, the following apply:
 - (1) The source must submit a title V permit application by the date specified in 40 CFR 63.541(c) as currently written or subsequently amended.
 - (2) No owner or operator of a blast (cupola), reverberatory, or rotary dryer shall discharge or cause to be discharged into the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).
 - (3) No owner or operator of a collocated blast (cupola) and reverberatory furnace shall discharge or cause to be discharged into the atmosphere any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, when both furnaces are operating, except as follows below:

During periods when the reverberatory furnace is not operating, no owner or operator of a blast (cupola) furnace shall discharge or cause to be discharged into the atmosphere any gases that contain hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

During periods when only the reverberating furnace is operating, no total hydrocarbon limit applies to this source.

- (4) The blast (cupola) furnace charging process fugitive emissions exhaust shall not contain total hydrocarbons in excess of the limits specified above in (b)(3).
- (5) Process fugitive emission sources shall be equipped with an enclosure hood meeting the requirements of 40 CFR 63.544(b) or be located in a total enclosure subject to general ventilation that maintains the building at a lower than ambient pressure to ensure in-draft through any doorway opening.
- (6) Ventilation air from all enclosure hoods and total enclosures shall be conveyed to a control device. Gases discharged to the atmosphere from the control devices shall not contain lead compounds in excess of 2.0 million grams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).
- (7) All dryer emission vents shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 million grams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

- (a) The FESOP PM₁₀, and SO₂ limitations limit source wide emissions to less than one hundred (100) tons per twelve (12) consecutive month period for both PM₁₀ and SO₂.
- (b) Emissions of PM shall be less than one hundred (100) tons per twelve consecutive month period.
- (c) Pursuant to F035-5386-00028, the combined lead emissions from the twin packed bed sodium carbonate scrubber, ventilation baghouse, venturi scrubber, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall not exceed five (5) tons per twelve (12) consecutive month period (1.14 pounds per hour).

These limits are equivalent to the following limits:

Process	PM Limit (ton/yr)	PM Limit (lb/hr)
Battery crusher/breaker	18	4.11
Soda ash pneumatic conveying through 2 silos	1	0.23
Reverberatory furnace	3.58	0.82
Blast furnace	3.22	0.74
Pot furnaces	3.62	0.53
Pig casting	65	14.84
Rotary dryer	0.2	0.05

These limitations will render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of a secondary lead smelting plant shall be limited to less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Delaware County and the potential to emit of PM₁₀ and SO₂ is limited to less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-8 (FESOP)

(a) Pursuant to F035-5386-00028, the following limitations apply to the source:

- (1) The lead content of the battery throughput to the battery breaker/crusher shall not exceed 126,000 tons of scrap metal per twelve (12) consecutive month period.
- (2) The metal produced from the reverberatory furnace shall not exceed 100,000 tons per twelve (12) consecutive month period.
- (3) Only a mixture of 70% to 100% by weight slag and 0% to 30% by weight lead bearing materials may be charged in the blast furnace (cupola). The resulting metal produced by the blast furnace (cupola) shall not exceed 30,000 tons per twelve (12) consecutive month period.
- (4) The metal produced by both the reverberatory furnace and the blast furnace (cupola) shall not exceed a combined total of 120,000 tons per twelve (12) consecutive month period.
- (5) The metal refined in the pot furnaces shall not exceed a combined total production of 120,000 tons per twelve (12) consecutive month period.
- (6) All scrap metal processed through the battery breaker/crusher shall undergo the soda-ash/caustic soda neutralizing wash to reduce the generation of SO₂ emissions by 85%.

(b) These limits are equivalent to the following emission limitations:

- (1) Pursuant to F035-5386-00028, the combined PM₁₀ emissions from the twin packed bed sodium carbonate scrubber, ventilation baghouse, venturi scrubber, refinery baghouse, bin room baghouse, and wood pallet shredder baghouse shall not exceed 99.8 tons per twelve (12) consecutive month period (22.78 pounds per hour). This limit is structured such that when including emissions from insignificant combustion sources, the source wide total PM₁₀ emissions remain below one hundred (100) tons per twelve (12) consecutive month period.
- (2) Pursuant to F035-5386-00028, the SO₂ emissions shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (3) The emissions of a single HAP shall be limited to less than ten (10) tons per twelve (12) consecutive month period and the emissions of any combination of HAPs shall be limited to less than a total of twenty-five (25) tons per twelve (12) consecutive month period.

These limits render the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

326 IAC 5-1 (Visible Opacity Limitations)

326 IAC 5-1 (Visible Opacity Limitations) applies to all units at the source except for the reverberatory furnaces, pot furnaces, and the blast furnace (cupola). Pursuant to the rule, except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Boilers

326 IAC 6-2-3 (Particulate Emission Limitations for Source of Indirect Heating)

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) applies to the following pot furnaces:

Four (4) rated at 100 tons per year and 3.1 million British thermal units per hour; and

Two (2) rated at 50 tons per year and 3.1 million British thermal units per hour;

because they were all constructed in 1973 which is before the applicability date of this rule (September 21, 1983). Pursuant to this rule, the particulate matter (PM) from the following units shall be limited as follows:

Year	Unit	Q (MMBtu/hr)	Stack Height (ft)	Number of stacks	Pt (lb/MMBtu)	Emission Limit for each unit (lb/MMBtu)
1973	6 pot furnaces	3.1 + 3.1 + 3.1 + 3.1 + 3.1 + 3.1 = 18.6	82	1	4.01	0.6

This limitation is the lesser of 0.6 lb/MMBtu and the limit calculated using the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where C = 50 u/m³

Pt = pounds of particulate matter emitted per million Btu heat input (lb/MMBtu)

Q = total source maximum operating capacity rating (18.6 MMBtu/hr)

N = number of stacks (1)

a = plume rise factor (0.67)

h = stack height (82 ft)

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) applies to the rotary dryer, reverberatory furnace, and the following pot furnaces:

Three (3) rated at 125 tons per year and 3.5 million British thermal units per hour; and

Three (3) rated at 100 tons per year and 3.5 million British thermal units per hour;
because they were all constructed in 1989 which is after the applicability date of this rule
(September 21, 1983). Pursuant to this rule, the particulate matter (PM) from the following units
shall be limited as follows:

Year	Unit	Q (MMBtu/hr)	Stack Height (ft)	Number of stacks	Pt (lb/MMBtu)	Emission Limit for each unit (lb/MMBtu)
1989	Rotary dryer, reverberatory furnace, 6 pot furnaces	3.1 + 3.1 + 3.1 + 3.1 + 3.1 + 3.1 + 6 + 24.3 + 3.5 + 3.5 + 3.5 + 3.5 + 3.5 + 3.5 = 69.9	NA	NA	0.36	0.36

This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = pounds of particulate matter emitted per million Btu heat input (lb/MMBtu)
Q = total source maximum operating capacity rating (69.9 MMBtu/hr)

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the following units shall be limited as follows when operating at the listed process weight rate.

Unit	Process Weight Rate (ton/yr)	Emission Limit (lb/hr)
Battery crusher/breaker	126000	24.5
Soda ash pneumatic conveying through 2 silos	6389	3.3
Reverberatory furnace	100000	21.0
Blast furnace (cupola)	30000	9.4
Pot Furnaces	120000	23.7
Pig casting	240000	37.7

These limitations were calculated using the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

In order to comply with these limits, the twin packed bed sodium carbonate scrubber, ventilation baghouse, venturi scrubber, refinery baghouse, and bin room baghouse shall be in operation at all times that the facilities are in operation.

State Rule Applicability - Blast Furnace (Cupola)

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations) applies to the blast furnace (cupola) because the source has the potential to emit greater than twenty-five (25) tons per year of SO₂. Pursuant to this rule, the SO₂ emissions from the firing of coke fuel at the blast furnace (cupola) shall not exceed six (6) pounds per million British thermal units heat input.

State Rule Applicability - Insignificant Wood Pallet Shredder

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the wood pallet shredder shall be limited to 2.95 pounds per hour when operating at a process weight rate of 1222 pounds per hour. This limitation was calculated using the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

In order to comply with these limits, the wood pallet shredder baghouse shall be in operation at all times that the wood pallet shredder is in operation.

Testing Requirements

- (a) Testing was required in the original FESOP and will be required in this renewal FESOP for the venturi scrubber. The venturi scrubber shall be tested for PM, PM₁₀, and lead. The bin room baghouse shall be tested for PM, PM₁₀, and lead. The refinery baghouse shall be tested for lead, and the twin packed bed scrubber and ventilation baghouse shall be tested for PM, PM₁₀, and lead.
- (b) Pursuant to 40 CFR 63.543(h) and (i) and 63.544(e) and (f), the permittee shall conduct a compliance test for lead compounds on annual basis (no later than 12 calendar months following the previous compliance test). If a compliance test demonstrates a source emitted lead compounds at 1.0 milligrams of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the permittee shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous

compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The source has applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of the bin room baghouse, refinery baghouse, twin packed bed scrubber, venturi scrubber, and ventilation baghouse stack exhaust shall be performed once per day during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
 - (b) Visible emissions from the reverberatory furnace and blast furnace (cupola) shall be limited to twenty percent (20%) opacity.
 - (c) Visible emissions from the pot furnaces shall be limited to ten percent (10%) opacity.
 - (d) The Permittee shall record the total static pressure drop across all baghouses and scrubber used in conjunction with the rotary dryer, reverberatory furnace, blast furnace (cupola), pot furnaces, lead pig casting, and material storage and slag crushing, at least once daily when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop shall be maintained at the following ranges:
 - (1) Ventilation baghouse - 2 inches to 10 inches
 - (2) Venturi scrubber - 10 inches to 25 inches
 - (3) Twin packed bed sodium carbonate scrubber - 5 inches to 25 inches
 - (4) Bin room baghouse - 2 inches to 10 inches
 - (5) Refinery baghouse - 2 inches to 10 inches
 - (6) Process baghouse - 2 inches to 10 inches

or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps

for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouses and scrubbers for the secondary lead smelting operation must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this secondary lead smelting plant shall be subject to the conditions of the attached proposed renewal FESOP No.: 035-14180-00028.

Company Name: Exide Corporation
Address City IN Zip: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Permit Number: 035-14180-00028
Plt ID: 035-00028
Reviewe ERG/KC
Date: 06/12/01

NOTE: Emissions and emission calculations taken from F035-5386-00028

Battery Crusher/Breaker

Baghouse control efficiency = 98%

Air flow rate = 35,000 cuft/min

Grain loading = 0.14 gr/scf

PM after control = $0.014 \text{ gr/cuft} \times 35,000 \text{ cuft/min} \times \text{lb}/7000 \text{ gr} \times 60 \text{ min/hr} \times 8760 \text{ hr/yr} \times \text{ton}/2000 \text{ lb} = 18.4 \text{ ton/yr}$

PM before control = $18.4 \text{ tons/yr} / (1-.98) = 95 \text{ tons/yr}$

Lead emission before control = $1167 \text{ batteries/hr} \times 0.01 \text{ lb/batt} \times 8760 \text{ hr/yr} \times \text{ton}/2000 \text{ lb} = 51.2 \text{ ton/yr}$

note: emission factor is from a stack test

Lead emission after control = $51.2 \text{ tons/yr} \times (1-.98) = 1 \text{ ton/yr}$

Soda Ash Pneumatic Conveying thru 2 Silos

Throughput = 6389 ton/yr

Emission Factor = 0.00015 ton/ton

PM before control = $6389 \text{ ton/yr} \times 0.00015 \text{ ton/ton} \times 2 = 1.92 \text{ ton/yr}$

PM after control = $1.92 \text{ ton/yr} \times (1-.999) = 0 \text{ ton/yr}$

Reverberatory Furnace

Baghouse control efficiency = 99.8%

SO₂ scrubber control efficiency = 89.8%

Scrubber capture efficiency for PM and lead = 65%

Maximum throughput = 120,085 ton/yr

Emission Factors from SCC 3-04-004-02

Uncontrolled Emissions:

PM: $120085 \text{ ton/yr} \times 323 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 19393 \text{ ton/yr}$

PM₁₀: $120085 \text{ ton/yr} \times 193.8 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 1636 \text{ ton/yr}$

SO_x: $120085 \text{ ton/yr} \times 80 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 4803 \text{ ton/yr}$

NO_x: $120085 \text{ ton/yr} \times 0.3 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 18 \text{ ton/yr}$

Lead: $120085 \text{ ton/yr} \times 65 \text{ lb/ton} \times \text{ton}/2000 \text{ lb} = 3903 \text{ ton/yr}$

Controlled Emissions:

PM: $19393 \text{ ton/yr} \times (1-.998) \times (1-.65) = 3.58 \text{ ton/yr}$

PM₁₀: $1636 \text{ ton/yr} \times (1-.998) \times (1-.65) = 1.15 \text{ ton/yr}$

SO_x:

The SO₂ emissions are controlled by the first acid and soda wash which is equivalent to 85% and the scrubber efficiency which is 89.8%

SO_x: $4803 \text{ ton/yr} \times (1-.85) \times (1-.898) = 73.49 \text{ ton/yr}$

NO_x: 18 ton/yr

Lead: $3903 \text{ ton/yr} \times (1-.998) \times (1-.65) = 1.4 \text{ ton/yr}$

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

**Company Name: Exide Corporation
Address City IN Zip: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Permit Number: 035-14180-00028
Plt ID: 035-00028
Reviewer: ERG/KC
Date: 06/12/01**

Heat Input Capacity Potential Throughput
MMBtu/hr MMCF/yr

49 429.24

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	1.63	1.63	0.13	21.46	1.18	18.03

*PM and PM10 emission factors are combined filterable and condensable PM and PM10, respectively.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Page 4 of 4 TSD App A

**Company Name: Exide Corporation
Address City IN Zip: 2601 West Mt. Pleasant Blvd., Muncie, Indiana 47302
Permit Number: 035-14180-00028
Plt ID: 035-00028
Reviewer: ERG/KC
Date: 06/12/01**

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.10E-03	Dichlorobenzene 1.20E-03	Formaldehyde 7.50E-02	Hexane 1.80E+00	Toluene 3.40E-03
Potential Emission in tons/yr	4.51E-04	2.58E-04	1.61E-02	3.86E-01	7.30E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.00E-04	Cadmium 1.10E-03	Chromium 1.40E-03	Manganese 3.80E-04	Nickel 2.10E-03
Potential Emission in tons/yr	1.07E-04	2.36E-04	3.00E-04	8.16E-05	4.51E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Environmental Protection Agency

§ 63.541

TABLE 1 TO SUBPART W—GENERAL PROVISIONS APPLICABILITY TO SUBPART W—Continued

Reference	Applies to subpart W			Comment
	BLR	WSR	WSR alter- native stand- ard, and BLR equipment leak standard (40 CFR part 63, subpart H)	
§ 63.8(c)(4)–(8)	No	No	No	Subpart W specifies monitoring frequencies.
§ 63.8(d)	No	No	No.	
§ 63.8(e)	No	No	No.	
§ 63.8(f)(1)	Yes	Yes	Yes.	
§ 63.8(f)(2)	Yes	Yes	Yes.	
§ 63.8(f)(3)	Yes	Yes	Yes.	
§ 63.8(f)(4)	Yes	Yes	Yes.	
§ 63.8(f)(5)	Yes	Yes	Yes.	
§ 63.8(f)(6)	Yes	Yes	No.	
§ 63.8(g)	Yes	Yes	Yes.	
§ 63.9(a)	Yes	Yes	Yes.	
§ 63.9(b)(1)(i)–(ii)	Yes	Yes	Yes.	
§ 63.9(b)(1)(iii)	Yes	Yes	Yes.	
§ 63.9(b)(2)	Yes	Yes	Yes.	
§ 63.9(b)(3)	Yes	Yes	Yes.	
§ 63.9(b)(4)	Yes	Yes	Yes.	
§ 63.9(b)(5)	Yes	Yes	Yes.	
§ 63.9(c)	Yes	Yes	Yes.	
§ 63.9(d)	Yes	Yes	Yes.	
§ 63.9(e)	No	No	No.	
§ 63.9(f)	No	No	No.	
§ 63.9(g)	No	No	No.	
§ 63.9(h)(1)–(3)	Yes	Yes	No	Separate Notification of Compliance Status re- quirements are specified for subpart H. Reserved. Subpart H specifies Notification of Compliance Status requirements.
§ 63.9(h)(4)	N/A	N/A	N/A	
§ 63.9(h)(5)–(6)	Yes	Yes	No	
§ 63.9(i)	Yes	Yes	Yes.	Subparts H and W specify recordkeeping re- quirements.
§ 63.9(j)	Yes	Yes	Yes.	
§ 63.10(a)	Yes	Yes	Yes.	
§ 63.10(b)(1)	Yes	Yes	Yes.	
§ 63.10(b)(2)	No	No	No	
§ 63.10(b)(3)	Yes	Yes	Yes.	Subpart H specifies performance test reporting requirements. Subpart H specifies performance test reporting requirements.
§ 63.10(c)(1)–(6)	No	No	No.	
§ 63.10(c)(7)–(8)	Yes	Yes	Yes.	
§ 63.10(c)(9)–(15)	No	No	No.	
§ 63.10(d)(1)	Yes	Yes	No	
§ 63.10(d)(2)	Yes	Yes	No	
§ 63.10(d)(3)	No	No	No.	
§ 63.10(d)(4)	Yes	Yes	Yes.	
§ 63.10(d)(5)	Yes	Yes	Yes.	
§ 63.10(e)(1)–(2)	No	No	No.	
§ 63.10(e)(3)	Yes	Yes	No.	
§ 63.10(e)(4)	No	No	No.	
§ 63.10(f)	Yes	Yes	Yes.	
§ 63.11–63.15	Yes	Yes	Yes.	

Subpart X—National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting

SOURCE: 62 FR 32216, June 13, 1997, unless otherwise noted.

§ 63.541 Applicability.

(a) The provisions of this subpart apply to the following affected sources at all secondary lead smelters: blast, reverberatory, rotary, and electric smelting furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive sources; and fugitive dust

sources. The provisions of this subpart do not apply to primary lead smelters, lead refiners, or lead remelters.

(b) Table 1 of this subpart specifies the provisions of subpart A that apply

and those that do not apply to owners and operators of secondary lead smelters subject to this subpart.

TABLE 1.—GENERAL PROVISIONS APPLICABILITY TO SUBPART X

Reference	Applies to subpart X	Comment
63.1	Yes.	
63.2	Yes.	
63.3	Yes.	
63.4	Yes.	
63.5	Yes.	
63.6 (a), (b), (c), (e), (f), (g), (i) and (j)	Yes.	
63.6 (d) and (h)	No	No opacity limits in rule.
63.7	Yes.	
63.8	Yes.	
63.9 (a), (b), (c), (d), (e), (g), (h)(1–3), (h)(5–6), and (j)	Yes.	
63.9 (f) and (h)(4)	No	No opacity or visible emission limits in subpart X.
63.10	Yes.	
63.11	No	Flares will not be used to comply with the emission limits.
63.12 to 63.15	Yes.	

(c) If you are the owner or operator of a source subject to the provisions of this subpart, you are also subject to title V permitting requirements under 40 CFR parts 70 or 71, as applicable. Your title V permitting authority may defer your source from these permitting requirements until December 9, 2004, if your source is not a major source and is not located at a major source as defined under 40 CFR 63.2, 70.2, or 71.2, and is not otherwise required to obtain a title V permit. If you receive a deferral under this section, you must submit a title V permit application by December 9, 2005. You must continue to comply with the provisions of this subpart applicable to area sources, even if you receive a deferral from title V permitting requirements.

[62 FR 32216, June 13, 1997, as amended at 64 FR 4572, Jan. 29, 1999; 64 FR 69643, Dec. 14, 1999]

§ 63.542 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Agglomerating furnace means a furnace used to melt into a solid mass flue dust that is collected from a baghouse.

Bag leak detection system means an instrument that is capable of monitoring

particulate matter (dust) loadings in the exhaust of a baghouse in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, transmittance or other effect to monitor relative particulate matter loadings.

Battery breaking area means the plant location at which lead-acid batteries are broken, crushed, or disassembled and separated into components.

Blast furnace means a smelting furnace consisting of a vertical cylinder atop a crucible, into which lead-bearing charge materials are introduced at the top of the furnace and combustion air is introduced through tuyeres at the bottom of the cylinder, and that uses coke as a fuel source and that is operated at such a temperature in the combustion zone (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Blast furnace charging location means the physical opening through which raw materials are introduced into a blast furnace.

Collocated blast furnace and reverberatory furnace means operation at the same location of a blast furnace and a reverberatory furnace with the volumetric flow rate discharged from the blast furnace being at equal to or less

than that discharged from the reverberatory furnace.

Dryer means a chamber that is heated and that is used to remove moisture from lead-bearing materials before they are charged to a smelting furnace.

Dryer transition piece means the junction between a dryer and the charge hopper or conveyor, or the junction between the dryer and the smelting furnace feed chute or hopper located at the ends of the dryer.

Electric furnace means a smelting furnace consisting of a vessel into which reverberatory furnace slag is introduced and that uses electrical energy to heat the reverberatory furnace slag to such a temperature (greater than 980 °C) that lead compounds are reduced to elemental lead metal.

Enclosure hood means a hood that covers a process fugitive emission source on the top and on all sides, with openings only for access to introduce or remove materials to or from the source and through which an induced flow of air is ventilated.

Fugitive dust source means a stationary source of hazardous air pollutant emissions at a secondary lead smelter that is not associated with a specific process or process fugitive vent or stack. Fugitive dust sources include, but are not limited to, roadways, storage piles, materials handling transfer points, materials transport areas, storage areas, process areas, and buildings.

Furnace and refining/casting area means any area of a secondary lead smelter in which:

- (1) Smelting furnaces are located; or
- (2) Refining operations occur; or
- (3) Casting operations occur.

High efficiency particulate air (HEPA) filter means a filter that has been certified by the manufacturer to remove 99.97 percent of all particles 0.3 micrometers and larger.

Lead alloy means an alloy in which the predominant component is lead.

Materials storage and handling area means any area of a secondary lead smelter in which lead-bearing materials (including, but not limited to, broken battery components, reverberatory furnace slag, flue dust, and dross) are stored or handled between process steps including, but not limited to, areas in which materials are stored in

piles, bins, or tubs, and areas in which material is prepared for charging to a smelting furnace. Materials storage and handling area does not include areas used exclusively for storage of blast furnace slag.

Partial enclosure means a structure comprised of walls or partitions on at least three sides or three-quarters of the perimeter surrounding stored materials or process equipment to prevent the entrainment of particulate matter into the air.

Pavement cleaning means the use of vacuum equipment, water sprays, or a combination thereof to remove dust or other accumulated material from the paved areas of a secondary lead smelter.

Plant roadway means any area of a secondary lead smelter that is subject to vehicle traffic, including traffic by fork lifts, front-end loaders, or vehicles carrying whole batteries or cast lead ingots. Excluded from this definition are employee and visitor parking areas, provided they are not subject to traffic by vehicles carrying lead-bearing materials.

Pressurized dryer breaching seal means a seal system connecting the dryer transition pieces which is maintained at a higher pressure than the inside of the dryer.

Process fugitive emission source means a source of hazardous air pollutant emissions at a secondary lead smelter that is associated with lead smelting or refining, but is not the primary exhaust stream from a smelting furnace, and is not a fugitive dust source. Process fugitive sources include, but are not limited to, smelting furnace charging points, smelting furnace lead and slag taps, refining kettles, agglomerating furnaces, and drying kiln transition pieces.

Refining kettle means an open-top vessel that is constructed of cast iron or steel and is indirectly heated from below and contains molten lead for the purpose of refining and alloying the lead. Included are pot furnaces, receiving kettles, and holding kettles.

Reverberatory furnace means a refractory-lined furnace that uses one or more flames to heat the walls and roof of the furnace and lead-bearing scrap to such a temperature (greater than 980

°C) that lead compounds are chemically reduced to elemental lead metal.

Rotary furnace (also known as a rotary reverberatory furnace) means a furnace consisting of a refractory-lined chamber that rotates about a horizontal axis and that uses one or more flames to heat the walls of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Secondary lead smelter means any facility at which lead-bearing scrap material, primarily, but not limited to, lead-acid batteries, is recycled into elemental lead or lead alloys by smelting.

Smelting means the chemical reduction of lead compounds to elemental lead or lead alloys through processing in high-temperature (greater than 980 °C) furnaces including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

Total enclosure means a roofed and walled structure with limited openings to allow access and egress for people and vehicles that meets the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i).

Vehicle wash means a device for removing dust and other accumulated material from the wheels, body, and underside of a vehicle to prevent the inadvertent transfer of lead contaminated material to another area of a secondary lead smelter or to public roadways.

Wet suppression means the use of water, water combined with a chemical surfactant, or a chemical binding agent to prevent the entrainment of dust into the air from fugitive dust sources.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.543 Standards for process sources.

(a) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast, reverberatory, rotary, or electric smelting furnace any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

(b) [Reserved]

(c) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast furnace or reverberatory furnace any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, except as allowed under Paragraphs (c)(1) and (c)(2) of this section.

(1) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(2) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(d) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(e) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(f) If the owner or operator of a blast furnace or collocated blast furnace and reverberatory furnace combines the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges them to the atmosphere through a common emission point, then compliance with the applicable total hydrocarbon concentration limit under paragraph (c) of this section shall be determined downstream from the point at which the two emission streams are combined.

(g) If the owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace does not combine the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges such emissions to the atmosphere through separate emission points, then exhaust shall not contain total hydrocarbons in excess of 20 parts

per million by volume, expressed as propane.

(h) Except as provided in paragraph (i) of this section, following the initial test to demonstrate compliance with paragraph (a) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).

(i) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.

(j) The standards for process sources are summarized in table 2.

TABLE 2.—SUMMARY OF STANDARDS FOR PROCESS SOURCES

Furnace configuration	Lead compounds (milligrams per dry standard cubic meter)	Total hydrocarbons	Citation
Collocated blast furnace and reverberatory furnace:			
When both furnaces operating ..	2.0	20 parts per million by volume ¹	§ 63.543(a),(c).
When reverberatory furnace not operating.	2.0	360 parts per million by volume ¹ (existing).	§ 63.543(a),(c)(1).
	.....	70 parts per million by volume ¹ (new) ² .	§ 63.543(a),(c)(2).
Blast	2.0	360 parts per million by volume ¹ (existing).	§ 63.543(a),(d).
	.....	70 parts per million by volume ¹ (new) ² .	§ 63.543(e).
	.....	0.20 kilograms per hour ³	§ 63.543(g).
Reverberatory, rotary, and electric ...	2.0	Not applicable	§ 63.543(a).

¹ Total hydrocarbons emission limits are as propane at 4 percent carbon dioxide to correct for dilution, based on a 3-hour average.

² New sources include those furnaces that commence construction or reconstruction after June 9, 1994.

³ Applicable to blast furnace charging process fugitive emissions that are not combined with the blast furnace process emissions prior to the point at which compliance with the total hydrocarbons concentration standard is determined.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.544 Standards for process fugitive sources.

(a) Each owner or operator of a secondary lead smelter shall control the process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section in accordance with the equipment and operational standards

presented in paragraphs (b) and (c) of this section.

- (1) Smelting furnace and dryer charging hoppers, chutes, and skip hoists;
- (2) Smelting furnace lead taps, and molds during tapping;
- (3) Smelting furnace slag taps, and molds during tapping;
- (4) Refining kettles;
- (5) Dryer transition pieces; and
- (6) Agglomerating furnace product taps.

(b) Process fugitive emission sources shall be equipped with an enclosure hood meeting the requirements of paragraphs (b)(1), (b)(2), or (b)(3) of this section, or be located in a total enclosure subject to general ventilation that maintains the building at a lower than ambient pressure to ensure in-draft through any doorway opening.

(1) All process fugitive enclosure hoods except those specified for refining kettles and dryer transition pieces shall be ventilated to maintain a face velocity of at least 90 meters per minute (300 feet per minute) at all hood openings.

(2) Process fugitive enclosure hoods required for refining kettles in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 75 meters per minute (250 feet per minute).

(3) Process fugitive enclosure hoods required over dryer transition pieces in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 110 meters per minute (350 feet per minute).

(c) Ventilation air from all enclosures hoods and total enclosures shall be conveyed to a control device. Gases discharged to the atmosphere from these control devices shall not contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

(d) All dryer emission vents and agglomerating furnace emission vents

shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

(e) Except as provided in paragraph (f) of this section, following the date of the initial test to demonstrate compliance with paragraphs (c) and (d) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).

(f) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.

(g) As an alternative to paragraph (a)(5) of this section, an owner or operator may elect to control the process fugitive emissions from dryer transition pieces by installing and operating pressurized dryer breaching seals at each transition piece.

(h) The standards for process fugitive sources are summarized in table 3.

TABLE 3.—SUMMARY OF STANDARDS FOR PROCESS FUGITIVE SOURCES

Fugitive emission source	Control device lead compound emission limit (milligrams per dry standard cubic meter)	Enclosed hood or doorway face velocity (meters/minute)	Citation
Control Option I			
Smelting furnace and dryer charging hoppers, chutes, and skip hoists.	2.0	¹ 90	§ 63.544 (b), (c).
Smelting furnace lead taps and molds during tapping.	2.0	¹ 90	§ 63.544 (b), (c).
Smelting furnace slag taps and molds during tapping.	2.0	¹ 90	§ 63.544 (b), (c).
Refining kettles	2.0	¹ 75	§ 63.544 (b), (c).
Dryer transition pieces	2.0	¹ 110	§ 63.544 (b), (c).
Agglomerating furnace process vents and product taps.	2.0	¹ 90	§ 63.544 (b), (c).
Control Option II			
Enclosed building ventilated to a control device	2.0	.....	§ 63.544 (b), (c).

TABLE 3.—SUMMARY OF STANDARDS FOR PROCESS FUGITIVE SOURCES—Continued

Fugitive emission source	Control device lead compound emission limit (mil- ligrams per dry standard cubic meter)	Enclosed hood or doorway face ve- locity (meters/ minute)	Citation
Applicable to Both Control Options			
Dryer and agglomerating furnace emission vents ..	2.0	.....	§ 63.544(d).

¹ Enclosure hood face velocity applicable to those process fugitive sources not located in an enclosed building ventilated to a control device.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.545 Standards for fugitive dust sources.

(a) Each owner or operator of a secondary lead smelter shall prepare and at all times operate according to a standard operating procedures manual that describes in detail the measures that will be put in place to control fugitive dust emission sources within the areas of the secondary lead smelter listed in paragraphs (a)(1) through (a)(5) of this section.

- (1) Plant roadways;
- (2) Battery breaking area;
- (3) Furnace area;
- (4) Refining and casting area; and
- (5) Materials storage and handling area.

(b) The standard operating procedures manual shall be submitted to the Administrator or delegated authority for review and approval.

(c) The controls specified in the standard operating procedures manual shall at a minimum include the requirements of paragraphs (c)(1) through (c)(5) of this section.

(1) Plant roadways—paving of all areas subject to vehicle traffic and pavement cleaning twice per day of those areas, except on days when natural precipitation makes cleaning unnecessary or when sand or a similar material has been spread on plant roadways to provide traction on ice or snow.

(2) Battery breaking area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, and pavement cleaning twice per day; or total enclosure of the battery breaking area.

(3) Furnace area—partial enclosure and pavement cleaning twice per day; or total enclosure and ventilation of the enclosure to a control device.

(4) Refining and casting area—partial enclosure and pavement cleaning twice per day; or total enclosure and ventilation of the enclosure to a control device.

(5) Materials storage and handling area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, vehicle wash at each exit from the area, and paving of the area; or total enclosure of the area and ventilation of the enclosure to a control device, and a vehicle wash at each exit.

(d) The standard operating procedures manual shall require that daily records be maintained of all wet suppression, pavement cleaning, and vehicle washing activities performed to control fugitive dust emissions.

(e) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any building or enclosure ventilation system any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

§ 63.546 Compliance dates.

(a) Each owner or operator of an existing secondary lead smelter shall achieve compliance with the requirements of this subpart no later than December 23, 1997. Existing sources wishing to apply for an extension of compliance pursuant to section § 63.6(i) of this part must do so no later than June 23, 1997.

(b) Each owner or operator of a secondary lead smelter that commences

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construction or reconstruction after June 9, 1994, shall achieve compliance with the requirements of this subpart by June 13, 1997 or upon startup of operations, whichever is later.

[62 FR 32216, June 13, 1997, as amended at 64 FR 4572, Jan. 29, 1999]

§ 63.547 Test methods.

(a) The following test methods in appendix A of part 60 listed in paragraphs (a)(1) through (a)(5) of this section shall be used to determine compliance with the emission standards for lead compounds under §§ 63.543(a), 63.544 (c), and (d), and 63.545(e):

(1) Method 1 shall be used to select the sampling port location and the number of traverse points.

(2) Method 2 shall be used to measure volumetric flow rate.

(3) Method 3 shall be used for gas analysis to determine the dry molecular weight of the stack gas.

(4) Method 4 shall be used to determine moisture content of the stack gas.

(5) Method 12 shall be used to determine compliance with the lead compound emission standards. The minimum sample volume shall be 0.85 dry standard cubic meters (30 dry standard cubic feet) and the minimum sampling time shall be 60 minutes for each run. Three runs shall be performed and the average of the three runs shall be used to determine compliance.

(b) The following tests methods in appendix A of part 60 listed in paragraphs (b)(1) through (b)(4) of this section shall be used, as specified, to determine compliance with the emission standards for total hydrocarbons § 63.543(c), (d), (e), and (g).

(1) Method 1 shall be used to select the sampling port location to determine compliance under § 63.543(c), (d), (e), and (g).

(2) The Single Point Integrated Sampling and Analytical Procedure of Method 3B shall be used to measure the carbon dioxide content of the stack gases to determine compliance under § 63.543(c), (d), and (e).

(3) Method 4 shall be used to measure moisture content of the stack gases to determine compliance under § 63.543(c), (d), (e), and (g).

(4) Method 25A shall be used to measure total hydrocarbon emissions to determine compliance under § 63.543(c), (d), (e), and (g). The minimum sampling time shall be 1 hour for each run. A minimum of three runs shall be performed. A 1-hour average total hydrocarbon concentration shall be determined for each run and the average of the three 1-hour averages shall be used to determine compliance. The total hydrocarbon emissions concentrations for determining compliance under § 63.543(c), (d), and (e) shall be expressed as propane and shall be corrected to 4 percent carbon dioxide, as described in paragraph (c) of this section.

(c) For the purposes of determining compliance with the emission limits under § 63.543 (c), (d), and (e), the measured total hydrocarbon concentrations shall be corrected to 4 percent carbon dioxide as listed in paragraphs (c)(1) through (c)(2) of this section in the following manner:

(1) If the measured percent carbon dioxide is greater than 0.4 percent in each compliance test, the correction factor shall be determined by using equation (1).

$$F = \frac{4.0}{\text{CO}_2} \quad (1)$$

where:

F = correction factor (no units)

CO₂ = percent carbon dioxide measured using Method 3B, where the measured carbon dioxide is greater than 0.4 percent.

(2) If the measured percent carbon dioxide is equal to or less than 0.4 percent, then a correction factor (F) of 10 shall be used.

(3) The corrected total hydrocarbon concentration shall be determined by multiplying the measured total hydrocarbon concentration by the correction factor (F) determined for each compliance test.

(d) Compliance with the face velocity requirements under § 63.544(b) for process fugitive enclosure hoods shall be determined by the following test methods in paragraphs (d)(1) or (d)(2) of this section.

(1) Owners and operators shall calculate face velocity using the procedures in paragraphs (d)(1)(i) through (d)(1)(iv) of this section.

(i) Method 1 shall be used to select the sampling port location in the duct leading from the process fugitive enclosure hood to the control device.

(ii) Method 2 shall be used to measure the volumetric flow rate in the duct from the process fugitive enclosure hood to the control device.

(iii) The face area of the hood shall be determined from measurement of the hood. If the hood has access doors, then face area shall be determined with the access doors in the position they are in during normal operating conditions.

(iv) Face velocity shall be determined by dividing the volumetric flow rate determined in paragraph (d)(1)(ii) of this section by the total face area for the hood determined in paragraph (d)(1)(iii) of this section.

(2) The face velocity shall be measured directly using the procedures in paragraphs (d)(2)(i) through (d)(2)(v) of this section.

(i) A propeller anemometer or equivalent device shall be used to measure hood face velocity.

(ii) The propeller of the anemometer shall be made of a material of uniform density and shall be properly balanced to optimize performance.

(iii) The measurement range of the anemometer shall extend to at least 300 meters per minute (1,000 feet per minute).

(iv) A known relationship shall exist between the anemometer signal output and air velocity, and the anemometer must be equipped with a suitable read-out system.

(v) Hood face velocity shall be determined for each hood open during normal operation by placing the anemometer in the plane of the hood opening. Access doors shall be positioned consistent with normal operation.

(e) Owners and operators shall determine compliance with the doorway in-draft requirement for enclosed buildings in §63.544(b) using the procedures in paragraphs (e)(1) or (e)(2) of this section.

(1)(i) Owners and operators shall use a propeller anemometer or equivalent

device meeting the requirements of paragraphs (d)(2)(ii) through (d)(2)(iv) of this section.

(ii) Doorway in-draft shall be determined by placing the anemometer in the plane of the doorway opening near its center.

(iii) Doorway in-draft shall be demonstrated for each doorway that is open during normal operation with all remaining doorways in the position they are in during normal operation.

(2)(i) Owners and operators shall install a differential pressure gage on the leeward wall of the building to measure the pressure difference between the inside and outside of the building.

(ii) The pressure gage shall be certified by the manufacturer to be capable of measuring pressure differential in the range of 0.02 to 0.2 mm Hg.

(iii) Both the inside and outside taps shall be shielded to reduce the effects of wind.

(iv) Owners and operators shall demonstrate the inside of the building is maintained at a negative pressure as compared to the outside of the building of no less than 0.02 mm Hg when all doors are in the position they are in during normal operation.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.548 Monitoring requirements.

(a) Owners and operators of secondary lead smelters shall prepare, and at all times operate according to, a standard operating procedures manual that describes in detail procedures for inspection, maintenance, and bag leak detection and corrective action plans for all baghouses (fabric filters) that are used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in §§63.543, 63.544, and 63.545, including those used to control emissions from building ventilation. This provision shall not apply to process fugitive sources that are controlled by wet scrubbers.

(b) The standard operating procedures manual for baghouses required by paragraph (a) of this section shall be submitted to the Administrator or delegated authority for review and approval.

(c) The procedures specified in the standard operating procedures manual for inspections and routine maintenance shall, at a minimum, include the requirements of paragraphs (c)(1) through (c)(9) of this section.

(1) Daily monitoring of pressure drop across each baghouse cell.

(2) Weekly confirmation that dust is being removed from hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms.

(3) Daily check of compressed air supply for pulse-jet baghouses.

(4) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.

(5) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

(6) Monthly check of bag tension on reverse air and shaker-type baghouses. Such checks are not required for shaker-type baghouses using self-tensioning (spring loaded) devices.

(7) Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.

(8) Quarterly inspection of fans for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means.

(9) Except as provided in paragraphs (g) and (h) of this section, continuous operation of a bag leak detection system.

(d) The procedures specified in the standard operating procedures manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.

(e) The bag leak detection system required by paragraph (c)(9) of this section, shall meet the specification and requirements of paragraphs (e)(1) through (e)(8) of this section.

(1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligram per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings.

(3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loadings is detected over a preset level.

(4) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.

(5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.

(6) Following initial adjustment, the owner or operator shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the approved SOP required under paragraph (a) of this section. In no event shall the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.

(7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector must be installed downstream of the baghouse and upstream of any wet acid gas scrubber.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(f) The standard operating procedures manual required by paragraph (a) of this section shall include a corrective action plan that specifies the procedures to be followed in the case of a bag leak detection system alarm. The corrective action plan shall include, at a minimum, the procedures used to determine and record the time and cause

of the alarm as well as the corrective actions taken to correct the control device malfunction or minimize emissions as specified in paragraphs (f)(1) and (f)(2) of this section.

(1) The procedures used to determine the cause of the alarm must be initiated within 30 minutes of the alarm.

(2) The cause of the alarm must be alleviated by taking the necessary corrective action(s) which may include, but not be limited to, paragraphs (f)(2)(i) through (f)(2)(vi) of this section.

(i) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media, or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(g) Baghouses equipped with HEPA filters as a secondary filter used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in § 63.543, 63.544, or 63.545 are exempt from the requirement in § 63.548(c)(9) of this section to be equipped with a bag leak detector. The owner or operator of an affected source that uses a HEPA filter shall monitor and record the pressure drop across the HEPA filter system daily. If the pressure drop is outside the limit(s) specified by the filter manufacturer, the owner or operator must take appropriate corrective measures, which may include but not be limited to those given in paragraphs (g)(1) through (g)(4) of this section.

(1) Inspecting the filter and filter housing for air leaks and torn or broken filters.

(2) Replacing defective filter media, or otherwise repairing the control device.

(3) Sealing off a defective control device by routing air to other control devices.

(4) Shutting down the process producing the particulate emissions.

(h) Baghouses that are used exclusively for the control of fugitive dust emissions from any source subject to the lead emissions standard in § 63.545 are exempt from the requirement in § 63.548(c)(9) of this section to be equipped with a bag leak detector.

(i) The owner or operator of a secondary lead smelter that uses a wet scrubber to control particulate matter and metal hazardous air pollutant emissions from a process fugitive source shall monitor and record the pressure drop and water flow rate of the wet scrubber during the initial test to demonstrate compliance with the lead emission limit under § 63.544(c) and (d). Thereafter, the owner or operator shall monitor and record the pressure drop and water flow rate at least once every hour and shall maintain the pressure drop and water flow rate no lower than 30 percent below the pressure drop and water flow rate measured during the initial compliance test.

(j) The owner or operator of a blast furnace or collocated blast furnace and reverberatory furnace subject to the total hydrocarbon standards in § 63.543 (c), (d), or (e), must comply with the requirements of either paragraph (j)(1) or (j)(2) of this section, to demonstrate continuous compliance with the total hydrocarbon emission standards.

(1) *Continuous Temperature Monitoring.* (i) The owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace subject to the total hydrocarbon emission standards in § 63.543 (c), (d), or (e) shall install, calibrate, maintain, and continuously operate a device to monitor and record the temperature of the afterburner or the combined blast furnace and reverberatory furnace exhaust streams consistent with the requirements for continuous monitoring systems in subpart A, General Provisions.

(ii) Prior to or in conjunction with the initial compliance test to determine compliance with § 63.543 (c), (d), or (e), the owner or operator shall conduct a performance evaluation for the temperature monitoring device according to § 63.8(e) of the General Provisions.

The definitions, installation specifications, test procedures, and data reduction procedures for determining calibration drift, relative accuracy, and reporting described in Performance Specification 2, 40 CFR Part 60, Appendix B, Sections 2, 3, 5, 7, 8, 9, and 10 shall be used to conduct the evaluation. The temperature monitoring device shall meet the following performance and equipment specifications:

(A) The recorder response range must include zero and 1.5 times the average temperature identified in paragraph (j)(1)(iii) of this section.

(B) The monitoring system calibration drift shall not exceed 2 percent of 1.5 times the average temperature identified in paragraph (j)(1)(iii) of this section.

(C) The monitoring system relative accuracy shall not exceed 20 percent.

(D) The reference method shall be an National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference, subject to the approval of the Administrator.

(iii) The owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace subject to the total hydrocarbon emission standards shall monitor and record the temperature of the afterburner or the combined blast furnace and reverberatory furnace exhaust streams every 15 minutes during the total hydrocarbon compliance test and determine an arithmetic average for the recorded temperature measurements.

(iv) To remain in compliance with the standards for total hydrocarbons, the owner or operator must maintain an afterburner or combined exhaust temperature such that the average temperature in any 3-hour period does not fall more than 28 °C (50 °F) below the average established in paragraph (j)(1)(iii) of this section. An average temperature in any 3-hour period that falls more than 28 °C (50 °F) below the average established in paragraph (j)(1)(iii) of this section, shall constitute a violation of the applicable emission standard for total hydrocarbons under § 63.543 (c), (d), or (e).

(2) *Continuous Monitoring of Total Hydrocarbon Emissions.* (i) The owner or operator of a secondary lead smelter

shall install, operate, and maintain a total hydrocarbon continuous monitoring system and comply with all of the requirements for continuous monitoring systems found in subpart A, General Provisions.

(ii) Prior to or in conjunction with the initial compliance test to determine compliance with § 63.543 (c), (d), or (e), the owner or operator shall conduct a performance evaluation for the total hydrocarbon continuous monitoring system according to § 63.8(e) of the General Provisions. The monitor shall meet the performance specifications of Performance Specification 8, 40 CFR Part 60, Appendix B.

(iii) Allowing the 3-hour average total hydrocarbon concentration to exceed the applicable total hydrocarbon emission limit under § 63.543 shall constitute a violation of the applicable emission standard for total hydrocarbons under § 63.543 (c), (d), or (e).

(k) The owner or operator of a secondary lead smelter who uses pressurized dryer breaching seals in order to comply with the requirements of § 63.544(g) shall equip each seal with an alarm that will “sound” or “go off” if the pressurized dryer breaching seal malfunctions.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.549 Notification requirements.

(a) The owner or operator of a secondary lead smelter shall comply with all of the notification requirements of § 63.9 of subpart A, General Provisions.

(b) The owner or operator of a secondary lead smelter shall submit the fugitive dust control standard operating procedures manual required under § 63.545(a) and the standard operating procedures manual for baghouses required under § 63.548(a) to the Administrator or delegated authority along with a notification that the smelter is seeking review and approval of these plans and procedures. Owners or operators of existing secondary lead smelters shall submit this notification no later than July 23, 1997. The owner or operator of a secondary lead smelter that commences construction or reconstruction after June 9, 1994, shall submit this notification no later than 180 days before startup of the constructed

or reconstructed secondary lead smelter, but no sooner than June 13, 1997. An affected source that has received a construction permit from the Administrator or delegated authority on or before June 23, 1995, shall submit this notification no later than July 23, 1997.

§ 63.550 Recordkeeping and reporting requirements.

(a) The owner or operator of a secondary lead smelter shall comply with all of the recordkeeping requirements under § 63.10 of the General Provisions. In addition, each owner or operator of a secondary lead smelter shall maintain for a period of 5 years, records of the information listed in paragraphs (a)(1) through (a)(6) of this section.

(1) An identification of the date and time of all bag leak detection system alarms, their cause, and an explanation of the corrective actions taken.

(2) If an owner or operator chooses to demonstrate continuous compliance with the total hydrocarbon emission standards under § 63.543 (c), (d), or (e) by employing the method allowed in § 63.548(j)(1), the records shall include the output from the continuous temperature monitor, an identification of periods when the 3-hour average temperature fell below the minimum established under § 63.548(j)(1), and an explanation of the corrective actions taken.

(3) If an owner or operator chooses to demonstrate continuous compliance with the total hydrocarbon emission standard under § 63.543 (c), (d), or (e) by employing the method allowed in § 63.548(j)(2), the records shall include the output from the total hydrocarbon continuous monitoring system, an identification of the periods when the 3-hour average total hydrocarbon concentration exceeded the applicable standard and an explanation of the corrective actions taken.

(4) Any recordkeeping required as part of the practices described in the standard operating procedures manual required under § 63.545(a) for the control of fugitive dust emissions.

(5) Any recordkeeping required as part of the practices described in the standard operating procedures manual for baghouses required under § 63.548(a).

(6) Records of the pressure drop and water flow rate for wet scrubbers used to control metal hazardous air pollutant emissions from process fugitive sources.

(b) The owner or operator of a secondary lead smelter shall comply with all of the reporting requirements under § 63.10 of the General Provisions. The submittal of reports shall be no less frequent than specified under § 63.10(e)(3) of the General Provisions. Once a source reports a violation of the standard or excess emissions, the source shall follow the reporting format required under § 63.10(e)(3) until a request to reduce reporting frequency is approved.

(c) In addition to the information required under § 63.10 of the General Provisions, reports required under paragraph (b) of this section shall include the information specified in paragraphs (c)(1) through (c)(6) of this section.

(1) The reports shall include records of all alarms from the bag leak detection system specified in § 63.548(e).

(2) The reports shall include a description of the procedures taken following each bag leak detection system alarm pursuant to § 63.548(f) (1) and (2).

(3) The reports shall include the information specified in either paragraph (c)(3)(i) or (c)(3)(ii) of this section, consistent with the monitoring option selected under § 63.548(h).

(i) A record of the temperature monitor output, in 3-hour block averages, for those periods when the temperature monitored pursuant to § 63.548(j)(1) fell below the level established in § 63.548(j)(1).

(ii) A record of the total hydrocarbon concentration, in 3-hour block averages, for those periods when the total hydrocarbon concentration being monitored pursuant to § 63.548(j)(2) exceeds the relevant limits established in § 63.543 (c), (d), and (e).

(4) The reports shall contain a summary of the records maintained as part of the practices described in the standard operating procedures manual for baghouses required under § 63.548(a), including an explanation of the periods when the procedures were not followed and the corrective actions taken.

(5) The reports shall contain an identification of the periods when the pressure drop and water flow rate of wet scrubbers used to control process fugitive sources dropped below the levels established in § 63.548(i), and an explanation of the corrective actions taken.

(6) The reports shall contain a summary of the fugitive dust control measures performed during the required reporting period, including an explanation of the periods when the procedures outlined in the standard operating procedures manual pursuant to § 63.545(a) were not followed and the corrective actions taken. The reports shall not contain copies of the daily records required to demonstrate compliance with the requirements of the standard operating procedures manuals required under §§ 63.545(a) and 63.548(a).

Subpart Y—National Emission Standards for Marine Tank Vessel Loading Operations

SOURCE: 61 FR 48399, Sept. 19, 1995, unless otherwise noted.

§ 63.560 Applicability and designation of affected source.

(a) *Maximum achievable control technology (MACT) standards.* (1) The provisions of this subpart pertaining to the MACT standards in § 63.562(b) and (d) of this subpart are applicable to existing and new sources with emissions of 10 or 25 tons, as that term is defined in § 63.561, except as specified in paragraph (d) of this section, and are applicable to new sources with emissions less than 10 and 25 tons, as that term is defined in § 63.561, except as specified in paragraph (d) of this section.

(2) Existing sources with emissions less than 10 and 25 tons are not subject to the emissions standards in § 63.562(b) and (d).

(3) The recordkeeping requirements of § 63.567(j)(4) and the emission estimation requirements of § 63.565(l) apply to existing sources with emissions less than 10 and 25 tons.

(b) *Reasonably available control technology (RACT) standards.* (1) The provisions of this subpart pertaining to RACT standards in § 63.562(c) and (d) of this subpart are applicable to sources with throughput of 10 M barrels or 200

M barrels, as that term is defined in § 63.561, except as specified in paragraph (d) of this section.

(2) Sources with throughput less than 10 M barrels and 200 M barrels, as that term is defined in § 63.561, are not subject to the emissions standards in § 63.562(c) and (d).

(c) *General Provisions applicability.* Owners or operators of affected sources, as that term is defined in § 63.561, of this subpart must comply with the requirements of subpart A of this part in accordance with the provisions for applicability of subpart A to this subpart in Table 1 of this section.

(d) *Exemptions from MACT and RACT standards.* (1) This subpart does not apply to emissions resulting from marine tank vessel loading operations, as that term is defined in § 63.561, of commodities with vapor pressures less than 10.3 kilopascals (kPa) (1.5 pounds per square inch, absolute) (psia) at standard conditions, 20 °C and 760 millimeters Hg (mm Hg).

(2) The provisions of this subpart pertaining to the MACT standards in § 63.562(b)(2), (3) and (4) and to the RACT standards in § 63.562(c)(3) and (4) do not apply to marine tank vessel loading operations where emissions are reduced by using a vapor balancing system, as that term is defined in § 63.561. The provisions pertaining to the vapor collection system, ship-to-shore compatibility, and vapor tightness of marine tank vessels in § 63.562(b)(1) and (c)(2) do apply.

(3) The provisions of this subpart pertaining to the MACT standards in § 63.562(b)(2), (3), and (4) do not apply to marine tank vessel loading operations that are contiguous with refinery operations at sources subject to and complying with subpart CC of this part, National Emissions Standards for Organic Hazardous Air Pollutants from Petroleum Refineries, except to the extent that any such provisions of this subpart are made applicable by subpart CC of this part.

(4) The provisions of this subpart pertaining to the MACT standards in § 63.562(b) and (d) do not apply to benzene emissions from marine tank vessel loading operations that are subject to and complying with 40 CFR part 61,

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see § 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM Method D2879–83 (incorporated by reference—see § 60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored

will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in § 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM Method D2879–83 (incorporated by reference—see § 60.17); or

(ii) ASTM Method D323–82 (incorporated by reference—see § 60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specifications of § 60.112b is exempt from the requirements of paragraphs (c) and (d) of this section.

§ 60.117b Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§ 60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

Subpart L—Standards of Performance for Secondary Lead Smelters

§ 60.120 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in secondary lead smelters: Pot furnaces of more than 250 kg (550 lb) charging capacity, blast (cupola) furnaces, and reverberatory furnaces.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11,

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1973, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977]

§ 60.121 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Reverberatory furnace* includes the following types of reverberatory furnaces: stationary, rotating, rocking, and tilting.

(b) *Secondary lead smelter* means any facility producing lead from a leadbearing scrap material by smelting to the metallic form.

(c) *Lead* means elemental lead or alloys in which the predominant component is lead.

[39 FR 9317, Mar. 8, 1974; 39 FR 13776, Apr. 17, 1974]

§ 60.122 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which:

(1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.

[39 FR 9317, Mar. 8, 1974, as amended at 40 FR 46259, Oct. 6, 1975]

§ 60.123 Test methods and procedures.

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in § 60.122 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration during representative periods of furnace operation, including charging and tapping. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

(2) Method 9 and the procedures in § 60.11 shall be used to determine opacity.

[54 FR 6667, Feb. 14, 1989]

Subpart M—Standards of Performance for Secondary Brass and Bronze Production Plants

§ 60.130 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in secondary brass or bronze production plants: Reverberatory and electric furnaces of 1,000 kg (2205 lb) or greater production capacity and blast (cupola) furnaces of 250 kg/h (550 lb/h) or greater production capacity. Furnaces from which molten brass or bronze are cast into the shape of finished products, such as foundry furnaces, are not considered to be affected facilities.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977, as amended at 49 FR 43618, Oct. 30, 1984]

§ 60.131 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Brass or bronze* means any metal alloy containing copper as its predominant constituent, and lesser amounts of zinc, tin, lead, or other metals.

(b) *Reverberatory furnace* includes the following types of reverberatory furnaces: Stationary, rotating, rocking, and tilting.

(c) *Electric furnace* means any furnace which uses electricity to produce over